

The Government Contractor Defense: When Do Governmental Interests Justify Excusing A Manufacturer's Liability for Defective Products?

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I. INTRODUCTION

In the early 1960s, after several years of study, prototype development, and intense collaboration with the United States Postal Service, Burroughs Corporation, under contract with the Postal Service, began manufacture of a massive seventy-seven foot long and nine-foot high automatic letter sorting machine consisting of twelve two-tier, piano-style keyboard work stations where Postal Service operators would rapidly sort the United States mail.¹ Over the years, Burroughs produced close to nine hundred of these machines for the Postal Service. Unfortunately, postal workers across the country routinely using these machines suffered severe repetitive-stress diseases such as bilateral carpal tunnel syndrome, arthritis, numbness, tingling, and tendinitis in the fingers, hands, wrists, and arms.²

The government and the manufacturer acquired information about these risks and the machine's ergonomic deficiencies as early as the 1960s. In fact, in 1966 and again in 1977 the manufacturer suggested modifications to the design of the machine in order to reduce worker stress, but the government refused to permit changes.³ Now, in the 1990s, claims against the manufacturer by Postal Service employees, crippled as a result of their use of the letter sorting machines, have been denied.⁴

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¹ See *Haltiwaner v. Unisys Corp.*, 949 F. Supp. 898, 900 (D.D.C. 1996). Unisys is the successor corporation to Burroughs. See *id.*

² See *id.* at 901.

³ See *Andrew v. Unisys Corp.*, 936 F. Supp. 821, 828 (W.D. Okla. 1996).

⁴ See, e.g., *Pierce v. Unisys Corp.*, No. 94-2324, 1997 WL 391809 (D.N.J. July 12, 1997); *Yeroshefsky v. Unisys Corp.*, 962 F. Supp. 710 (D. Md. 1997); *Houghtaling v.*

When is it reasonable to shield a manufacturer of a defective product from liability on the grounds that "[t]he [g]overnment made me do it"⁵ or that it "was just following orders?" When should the freedom from liability to injured individuals for the manufacture of defective products for the government outweigh recurring "harm to individual citizens" and justify contravening "the basic tenet that individuals be held accountable for their wrongful conduct[?]"⁶

Over fifty years ago, Justice Roger Traynor wrote:

Those who suffer injury from defective products are unprepared to meet its consequences. The cost of any injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business.⁷

Despite Justice Traynor's eloquent justification for imposing broad manufacturer liability, eight years ago, a deeply divided United States Supreme Court in *Boyle v. United Technologies Corp.*⁸ answered the question of *whether* a government contractor should be excused from liability for the manufacture of a defective product for the government in the affirmative. The Court failed, however, to give clear guidance to lower courts in determining *when* to excuse contractors from state product liability law. Now, considerable divergence exists among the federal circuits.⁹

Unisys Corp., 955 F. Supp. 309 (D.N.J. 1996); *Haltiwanger*, 949 F. Supp. 898; *Fagans v. Unisys Corp.*, 945 F. Supp. 3 (D.D.C. 1996); *Andrew*, 936 F. Supp. 821; *Russek v. Unisys Corp.*, 921 F. Supp. 1277 (D.N.J. 1996); *Wisner v. Unisys Corp.*, 917 F. Supp. 1501 (D. Kan. 1996); *Crespo v. Unisys Corp.*, No. 94-2339, 1996 WL 875565 (D.N.J. June 21, 1996).

⁵ *In re Joint E. & S. Dist. N.Y. Asbestos Litig.*, 897 F.2d 626, 632 (2d Cir. 1990).

⁶ *Boyle v. United Techs. Corp.*, 487 U.S. 500, 523 (1988) (5-4 decision) (Brennan, J., dissenting).

⁷ *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 441 (Cal. 1944) (Traynor, J., concurring); see also *Greenman v. Yuba Power Prods., Inc.*, 377 P.2d 897, 901 (Cal. 1962). For a discussion of principles underlying product liability and critical assessment, see generally 2 FOWLER V. HARPER & FLEMING JAMES, *THE LAW OF TORTS* § 28.1 (1956); Guido Calabresi, *Some Thoughts on Risk Distribution and the Law of Torts*, 70 YALE L.J. 499 (1961); Page Keeton, *Products Liability—Some Observations About Allocation of Risks*, 64 MICH. L. REV. 1329 (1966); Robert L. Rabin, *Restating the Law: The Dilemmas of Products Liability*, 30 U. MICH. J.L. REFORM 197 (1997); Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377, 405-13 (1994); John J. Wade, *On the Effect in Product Liability of Knowledge Unavailable Prior to Marketing*, 58 N.Y.U. L. REV. 734 (1983).

⁸ 487 U.S. 500 (1988).

⁹ See *id.* at 516 (Brennan, J., dissenting) (warning that "the Court's newly discovered Government contractor defense is breathtakingly sweeping").

Defining the breadth of *Boyle* has divided the federal courts. For example, the Ninth Circuit has refused to extend the defense beyond military procurement.¹⁰ It reads *Boyle* narrowly, allowing only military contractors producing military equipment not ordinarily sold on the commercial market to invoke the defense.¹¹ Other courts extend the defense to any government contractor whose work passes *Boyle*'s three-part test. The government contractor defense has been extended to include the following: manufacturers of letter sorting equipment for the United States Postal Service;¹² postal vehicles;¹³ ambulances;¹⁴ military air conditioners;¹⁵ army surplus tree-trimming belts;¹⁶ service contracts for the Department of Energy;¹⁷ a security guard service for a federal building;¹⁸ and the Environmental Protection Agency¹⁹—provided the process of formulating contract specifications passes *Boyle*'s three-prong test.

¹⁰ See *infra* notes 113-131 and accompanying text for an analysis of the Ninth Circuit's refusal to extend the defense beyond military procurement.

¹¹ See *In re Hawaii Fed. Asbestos Cases*, 960 F.2d 806, 811-12 (9th Cir. 1992).

¹² See, e.g., *Yeroshefsky v. Unisys Corp.*, 962 F. Supp. 710 (D. Md. 1997); *Houghtaling v. Unisys Corp.*, 955 F. Supp. 309 (D.N.J. 1996); *Haltiwanger v. Unisys Corp.*, 949 F. Supp. 898 (D.D.C. 1996); *Fagans v. Unisys Corp.*, 945 F. Supp. 3 (D.D.C. 1996); *Andrew v. Unisys Corp.*, 936 F. Supp. 821 (W.D. Okla. 1996); *Russek v. Unisys Corp.*, 921 F. Supp. 1277 (D.N.J. 1996); *Wisner v. Unisys Corp.*, 917 F. Supp. 1501 (D. Kan. 1996).

¹³ See *Johnson v. Grumman Corp.*, 806 F. Supp. 212, 213 (W.D. Wis. 1992) (finding that the defense extends beyond military contracts in case of injury due to postal service vehicle).

¹⁴ See *Carley v. Wheeled Coach*, 991 F.2d 1117, 1118 (3d Cir. 1993) (nonmilitary ambulance), *cert. denied*, 510 U.S. 863 (1993).

¹⁵ See *Stout v. Borg-Warner Corp.*, 933 F.2d 331, 337 (5th Cir. 1991) (finding that the government contractor defense applies to air conditioning unit built to maintain military equipment).

¹⁶ See *Glassco v. Miller Equip. Co.*, 966 F.2d 641, 643 (11th Cir. 1992) (holding that the government contractor defense applies to tree-trimming belt designed for use during Korean war and subsequently sold through army surplus).

¹⁷ See *Lamb v. Martin Marietta Energy Sys., Inc.*, 835 F. Supp. 959, 963 (W.D. Ky. 1993) (concluding that government contractor defense was available to a private contractor operating a uranium production plant for the Department of Energy). Another performance contract case extended the defense to a United Nations contractor. See *Askir v. Brown & Root Servs. Corp.*, No. 95-11008, 1997 WL 598587 (S.D.N.Y. Sept. 23 1997) (applying defense to private contractor providing logistical support to United Nations's peacekeeping operation in Somalia).

¹⁸ See *Guillory v. Ree's Contract Serv., Inc.*, 872 F. Supp. 344, 346 (S.D. Miss. 1994) (holding government contractor defense applies to a security service for Veterans Administration building).

¹⁹ See *Richland-Lexington Airport Dist. v. Atlas Properties, Inc.*, 854 F. Supp. 400, 424 (D.S.C. 1994) (determining government contractor defense applies to company obtained for EPA clean up).

There is also little consonance among federal courts as to how *Boyle* applies to the separate state-law tort claim that a government contractor breached its common-law duty to warn product users of dangers.²⁰ Notably, the Fifth Circuit and some lower courts broadly hold that a contractor is excused from the state-law duty to warn whenever the manufacturer has effectively invoked *Boyle* as to the related design defect, thus virtually negating the possibility of asserting a separate state-law failure-to-warn claim if *Boyle* applies to the design process.²¹ At the other end of the spectrum, the Second, Ninth, and Eleventh Circuits permit the government contractor defense to excuse contractors from their common-law duty to warn only when the government specifications actually precluded warnings or the specifications otherwise placed the contractor in conflict with its state-law duty to warn.²² The Sixth, Seventh, and Tenth Circuits along with certain lower courts have reached a middle ground by allowing a contractor to invoke the defense against a failure-to-warn claim only when the government approved reasonably precise warnings or approved the absence of warnings.²³

This article explores the application of *Boyle* in the context of federal procurement law among the federal courts. It challenges the emerging majority view that the governmental and economic underpinnings of *Boyle* are sufficiently strong in the nonmilitary context to warrant application of the defense in those cases. *Boyle* expressed concern that a lack of a contractor's defense would interfere with a federal officer's exercise of discretion, which is protected under the Federal Tort Claims Act,²⁴ and would cause economic harm to the government as manufacturers passed on product-liability costs. I ar-

²⁰ See *Russek v. Unisys Corp.*, 921 F. Supp. 1277, 1286-94 (D.N.J. 1996) (describing a split among the circuits and explaining that the *Boyle* defense is applicable to failure to warn when the *Boyle* defense is established as to design defect and relevant specifications were silent as to warnings).

²¹ See *infra* notes 180-184 and accompanying text for an analysis of this interpretation of *Boyle*.

²² See *infra* notes 171-179 and accompanying text for an analysis of the position of the Second, Ninth, and Eleventh Circuits.

²³ See *infra* notes 185-195 and accompanying text for an analysis of the middle ground taken by the Sixth, Seventh, and Tenth Circuits.

²⁴ 28 U.S.C. § 2680(a) (1994 & Supp. 1997). Sovereign immunity is not a beloved legal doctrine and there appears a "latent trend toward abolishing many forms of sovereign immunity previously recognized." *Peretti v. Montana*, 777 P.2d 329, 332 (Mont. 1989); see also *Evans v. Board of County Comm'rs*, 482 P.2d 968, 969 (Colo. 1971) ("The monarchical philosophies invented to solve the marital problems of Henry VIII are not sufficient justification for the denial of the right of recovery against the government in today's society. . . . [O]ur forbears [sic] won the Revolutionary War to rid themselves of such sovereign prerogatives").

gue that these federal interests are only sufficient to justify displacement of state tort law in the military context and that the consequences of passed-on procurement costs affect the government positively. Agreeing with the Ninth Circuit, I argue that *Boyle* should not be applied where no unique federal interests are at stake. In addition, neither the fear of passed-on costs nor concern for undermining discretionary functions justifies usurping state law unless the economic consequences or the impact on discretion are cloaked in national security or other military-defense issues.

As to the duty to warn, I argue that outside of the military arena, where soldiers generally must perform regardless of certain risks, contractors should not be excused for failing to warn of dangers associated with product use. Moreover, even within the military, contractors should be held to state tort law warning requirements unless precluded from warning under the specifications of the contract.

II. *BOYLE V. UNITED TECHNOLOGIES CORP.*: CONCERN FOR ECONOMIC CONSEQUENCES AND UNDERMINING FEDERAL DISCRETION

A. *Do Uniquely Federal Interests Significantly Conflict With Operation of State Law?*

Prior to the Supreme Court's ruling in 1988, the government contractor defense flourished in the appellate circuits for a number of years without a cohesive intellectual underpinning.²⁵ Something akin to a government contractor defense protected government contractors from Fifth Amendment takings claims when performing under exacting public works contracts on an agency theory.²⁶ In the product liability area, some courts grounded the defense in the *Feres-Stencel* doctrine,²⁷ in the Separation of Powers Doctrine,²⁸ through an

²⁵ See, e.g., *Tozer v. LTV Corp.*, 792 F.2d 403 (4th Cir. 1986); *Bynum v. FMC Corp.*, 770 F.2d 556 (5th Cir. 1985); *Tillett v. J.I. Case Co.*, 756 F.2d 591 (7th Cir. 1985); *McKay v. Rockwell Int'l Corp.*, 704 F.2d 444 (9th Cir. 1983). Compare *In re "Agent Orange" Product Liability Litigation*, 597 F. Supp. 740, 847-50 (E.D.N.Y. 1984) with *In re "Agent Orange" Product Liability Litigation*, 565 F. Supp. 1263, 1273 (E.D.N.Y. 1983) for anomalous holdings. See also generally Juanita M. Madole, ed., *The Government Contractor Defense: A Fair Defense or the Contractor's Shield?*, 1986 A.B.A. SEC. TORT AND INSURANCE PRACTICE 3-46 (tracing the history of the defense prior to *Boyle*).

²⁶ See *Yearsley v. W.A. Ross Constr. Co.*, 309 U.S. 18, 20 (1940) (invoking the agency theory).

²⁷ See *infra* note 76; see also *McKay*, 704 F.2d at 451; *In re "Agent Orange" Prod. Liab. Litig.*, 534 F. Supp. 1046, 1051 (E.D.N.Y. 1982).

²⁸ See *Shaw v. Grumman Aerospace Corp.*, 778 F.2d 736, 746 (11th Cir. 1985) (concluding defense is only applicable if contractor proves it did not participate or

extension of sovereign immunity,²⁹ or under state law.³⁰ Finally, in *Boyle*, the United States Supreme Court put to rest the question of whether a federal common-law defense existed and identified the source of the defense. However, even before the ink dried on the Court's opinion, litigants knew that the Court's identification of the source of the defense raised as many questions as it answered.³¹

In *Boyle*, copilot Lieutenant David Boyle drowned following the crash of his United States Marine Corps Sikorsky helicopter. His father alleged that the outward-opening escape hatch was ineffective in an underwater crash and that its handle was obstructed by other equipment.³² A jury rendered a verdict in favor of the plaintiff and the lower court denied Sikorsky's motion for judgment notwithstanding the verdict.³³ The United States Court of Appeals for the Fourth Circuit reversed, concluding that as a matter of federal law the government contractor defense shielded Sikorsky from liability for the defective design.³⁴ On review, the United States Supreme Court for the first time recognized a government contractor defense as a matter of federal common law.³⁵

In *Boyle*, the Supreme Court both recognized the government contractor defense and identified the rationale for precluding the imposition of state tort liability on government contractors in certain circumstances. The Court announced that the preemption of state law by the defense first required that a "unique federal interest" was at stake. The Court determined that a unique federal interest existed "in the context of government procurement."³⁶ The Court explained, however, that establishing the existence of a unique federal interest was merely a necessary—but not a sufficient—condition of

only minimally participated in the design of the products or product parts and warned the military of known risks). *Shaw's* formulation of the defense was rejected in *Boyle*. See *Boyle v. United Techs. Corp.*, 487 U.S. 500, 513 (1988).

²⁹ See *Boruski v. United States*, 803 F.2d 1421, 1430 (7th Cir. 1986) (finding that the "contractor has acted in the sovereign's stead"); *Burgess v. Colorado Serum Co.*, 772 F.2d 844, 847 (11th Cir. 1985) (examining nonmilitary manufacture of animal vaccine).

³⁰ See *Hansen v. Johns-Manville Prod. Corp.*, 734 F.2d 1036, 1044-45 (5th Cir. 1984) (finding that state-law sovereign immunity is the rationale behind the defense).

³¹ See generally A.L. Haizlip, *The Government Contractor Defense in Tort Liability: A Continuing Genesis*, 19 PUB. CONT. L.J. 117 (1989) (highlighting unresolved issues).

³² See *Boyle*, 487 U.S. at 503.

³³ See *id.*

³⁴ See *id.*

³⁵ See *id.* at 512.

³⁶ See *id.* at 506 (quoting *Bank of America Nat'l Trust & Sav. Ass'n v. Parnell*, 352 U.S. 29, 33 (1956)).

preemption.³⁷ The Court also held that preemption required the contractor to demonstrate that "a 'significant conflict' exist[ed] between an identifiable 'federal policy or interest and the [operation] of state law[.]'"³⁸ The Court identified the "potential for, and . . . outlines of" that significant conflict in the federal government's interest in protecting the federal benefits derived from its discretionary function immunity.³⁹ The Court justified the defense based upon two interests protected by the discretionary function—one economic and the other governmental.⁴⁰ The imposition of state tort law, the Court reasoned, jeopardized both interests.⁴¹

The Court explained that an economic detriment would occur without government-contractor immunity because "the contractor will [either] decline to manufacture the design specified by the government, or it will raise its price."⁴² "The financial burden of judgments against the contractors would ultimately be passed through, substantially if not totally, to the United States itself, since defense contractors will predictably raise their prices to cover, or to insure against, contingent liability for the Government-ordered designs."⁴³ The Court expressed concern that the economic benefits of the United States's discretionary immunity from suit for discretionary acts would be circumvented by the imposition of pass-through costs at the outset of the manufacturing contract.

Equally important to protecting the government's economic interests, the Court also feared that without the defense a manufacturer's exposure to state-law liability would undermine the purpose behind discretionary-function immunity enjoyed by federal officers and could place the contractor at odds with the federal interests the contractor served through performance of the contract. As the Court explained:

We think that the selection of the appropriate design for military equipment to be used by our Armed Forces is assuredly a discre-

³⁷ See *id.* at 507.

³⁸ *Boyle*, 487 U.S. at 507 (quoting *Wallis v. Pan Am. Petroleum Corp.*, 384 U.S. 63, 68 (1966)).

³⁹ See *id.* at 511. The "unique federal interest" in procurement that the Court found is a necessary but not sufficient condition of preemption is not identical to the federal policy or interest that the Court determined was in substantial conflict with state law. The federal policy in conflict with state law is the government's interest in protecting the procurement benefits derived from the immunity granted federal officers exercising discretion under the Federal Tort Claims Act.

⁴⁰ See *id.*

⁴¹ See *id.*

⁴² *Id.* at 507.

⁴³ *Id.* at 511-12.

tionary function It often involves not merely engineering analysis but judgment as to the balancing of many technical, military, and even social considerations, including specifically the trade-off between greater safety and greater combat effectiveness. And we are further of the view that permitting "second-guessing" of these judgments . . . through state tort suits against contractors would produce the same effect sought to be avoided by the [Federal Tort Claims Act] exemption.⁴⁴

Thus, at least in the context of military equipment, the Court recognized that a contractor's fear of liability could alter its relationship with federal officers exercising discretion when designing or approving designs for government purchases.

B. Boyle's Three-Part Test

After identifying the source of the "significant conflict" in government procurement as between state-law tort liability and its impact on discretionary acts by federal employees making procurement decisions, the Court next articulated its three-part test for determining when to insulate federal contractors:

Liability for design defects in military equipment cannot be imposed, pursuant to state law, when (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.⁴⁵

The Court reasoned that the first two conditions assured that the defense was only invoked when the policies underlying the discretionary function were in conflict with state law.⁴⁶ The Court also noted that the third requirement ensured that government contractors disclosed all knowledge of product risks to the government. This requirement helped assure that the government officer approving the design possessed sufficient information to exercise discretion intelligently.⁴⁷

As to the first prong, courts generally agree that under *Boyle*, "it is necessary only that the government approve, rather than create, the specifications."⁴⁸ However, the government approval must not be

⁴⁴ *Boyle*, 487 U.S. at 511.

⁴⁵ *Id.* at 512.

⁴⁶ *See id.*

⁴⁷ *See id.*

⁴⁸ *Carley v. Wheeled Coach*, 991 F.2d 1117, 1125 (3d Cir. 1993).

merely "rubber stamping"⁴⁹ and must reflect "continuous back and forth"⁵⁰ review of the design process. The specifications must be "detailed, precise and typically quantitative" as opposed to "[g]eneral qualitative specifications."⁵¹ Generalized specifications "calling for such vagaries as a failsafe, simple or inexpensive product . . . are [not] relevant to the government contractor defense."⁵² The examination of the approval relationship between the government officer and the contractor is necessary to establish that discretion of the officer is actually implicated.⁵³ However, the government officer need not design the product so long as the officer approved the specifications.⁵⁴

The second prong requires the manufacturer to prove that it conformed to the product specifications. "[A] product conforms to reasonably precise specifications if it satisfies 'an intended configuration' even if it 'may produce unintended and unwanted results.'"⁵⁵ On a motion for summary judgment, conformity may be established by showing that the government accepted the product and determined that it complied with the contract specifications.⁵⁶ Even an

⁴⁹ *Trevino v. General Dynamics Corp.*, 865 F.2d 1474, 1486 (5th Cir. 1989) ("A mere rubber stamp by a federal procurement officer does not constitute approval and does not give rise to the government contractor defense."); *see also* *Stout v. Borg-Warner Corp.*, 933 F.2d 331, 335-36 (5th Cir. 1991) (determining that meaningful review of relevant design features is required to invoke the defense); *cf.* *Strickland v. Royal Lubricant Co.*, 911 F. Supp. 1460, 1468 (M.D. Ala. 1995) (stating that contractor had "considerable discretion" in formulating components).

⁵⁰ *Tate v. Boeing Helicopters*, 55 F.3d 1150, 1154 (6th Cir. 1995).

⁵¹ *Kleeman v. McDonnell Douglas Corp.*, 890 F.2d 698, 703 (4th Cir. 1989) (quoting *Shaw v. Grumman Aerospace Corp.*, 778 F.2d 736, 745 (11th Cir. 1985)); *see also* *Gray v. Lockheed Aeronautical Sys. Co.*, 125 F.3d 1371, 1377-78 (11th Cir. 1997) (rejecting defense and explaining that reasonably precise specification requirement means that federal officer had discretion over significant details and critical design choices).

⁵² *Id.*

⁵³ *See In re Air Disaster at Ramstein Air Base, Germany*, 81 F.3d 570, 574 (5th Cir. 1996) ("The first two elements of the test ensure that the Government, and not the contractor, is exercising discretion in selecting the design."), *modified on denial of reh'g*, *Perez v. Lockheed Corp.*, 88 F.3d 340 (5th Cir. 1996), *cert. denied sub. nom. Chase v. Lockheed Corp.*, 117 S. Ct. 583 (1996).

⁵⁴ *See In re Aircraft Crash Litig. Frederick, Md.*, 752 F. Supp. 1326, 1342 (S.D. Ohio 1990) ("The principal issue for this Court is not who 'designed' the particular features . . . but whether the Air Force approved specifications for those features which were reasonably precise").

⁵⁵ *Kleeman*, 890 F.2d at 703 (quoting *Harduvel v. General Dynamics Corp.*, 878 F.2d 1311, 1317 (11th Cir. 1989)).

⁵⁶ *See Carley v. Wheeled Coach*, 991 F.2d 1117, 1126 (3d Cir. 1993). In *In re Aircraft Crash Litigation Frederick, Md.*, plaintiff claimed that the aircraft was not subjected to sufficiently rigorous testing, an interesting species of defectiveness. *See* 752

alleged manufacturing defect may be protected if the contractor can demonstrate that the government approved the method of manufacture.⁵⁷ "However, if a defect is the result of shoddy contractor workmanship, no federal interest justifies an immunity from liability."⁵⁸ Moreover, whether to characterize a defect as design or manufacturing is determined by federal common law rather than state law for the purposes of determining the applicability of the defense.⁵⁹ The conformity of the product must be established as to the particular feature claimed to be defective.⁶⁰

Because of the third prong's prophylactic aspects,⁶¹ courts require "a substantial showing that the manufacturer informed the

F. Supp. at 1355. The court held that the testing schedule was the result of collaboration between the military and the contractor and thus satisfied *Boyle*. See *id.* However, reordering and continuing to use a defectively manufactured product does not satisfy this prong. See *Gray*, 125 F.3d at 1378-79.

⁵⁷ See *Bailey v. McDonnell Douglas Corp.*, 989 F.2d 794, 800-01 (5th Cir. 1993) (holding that even if metallurgic content of bellows canister aboard Phantom II F-4D jet fighter is characterized as a manufacturing defect, government contractor defense may apply if the metallurgic content conformed to government specifications); see also *Bentzlin v. Hughes Aircraft Co.*, 833 F. Supp. 1486, 1491-92 n.8 (C.D. Cal. 1993). The government contractor defense may protect a manufacture from liability for a manufacturing defect where the government might incur passed-on cost of liability as a result of an approved manufacturing process. See *id.* The state secrets privilege may protect a manufacturer from liability for a manufacturing defect where the government has an interest in nondisclosure of the manufacturing process. See *id.* Compare *McGonigal v. Gearhart Indus., Inc.*, 851 F.2d 774, 777 (5th Cir. 1988) (concluding that government contractor defense does not apply "to the military contractor that mismanufactures military equipment").

⁵⁸ *Mitchell v. Lone Star Ammunition, Inc.*, 913 F.2d 242, 248 (5th Cir. 1990).

⁵⁹ See *Harduvel v. General Dynamics Corp.*, 878 F.2d 1311, 1317 (11th Cir. 1989) ("The government contractor defense is a matter of federal common law, and so is the denomination of a defect as one of design or manufacture for purposes of applying the defense. Were this not so, state law could operate either to defeat the defense or to expand it improperly"); cf. *Mitchell*, 913 F.2d at 247 n.10 ("In this Court's opinion, the relevant inquiry is the degree of manufacturer's responsibility for the defect in question. Indeed, the Eleventh Circuit in *Harduvel* recognized the validity of this inquiry").

⁶⁰ See *Bailey*, 989 F.2d at 801 n.15 ("[W]e note that where the government specifications are silent with respect to the particular feature in issue, *Boyle's* first condition—government approved reasonably precise specifications—would probably be in issue if the defense were applied to that feature"); *Lewis v. Babcock Indus., Inc.*, 985 F.2d 83, 86-87 (2d Cir. 1993) (examining reasonably precise specifications for the design feature in question).

⁶¹ See *Boyle v. United Techs. Corp.*, 487 U.S. 500, 512-13 (1988) ("We adopt this provision lest our effort to protect discretionary functions perversely impede them by cutting off information highly relevant to the discretionary decision."); see also *In re Air Disaster at Ramstein Air Base, Germany*, 81 F.3d 570, 574 (5th Cir. 1996) ("The third element is necessary to eliminate any incentive that this defense may create for contractors to withhold knowledge of risks").

government of known risks in the use of its product."⁶² Summary judgment is appropriate where evidence establishes one of the following: the government possessed "at least as much information on the dangers,"⁶³ the government "had first hand and superior knowledge of the problems,"⁶⁴ or there is no evidence that the manufacturer knew of any dangers associated with the product.⁶⁵ Where the government has reordered the manufactured product with knowledge of an alleged defect, the defense applies even if the defect was not identified during the design phase.⁶⁶ Importantly, the duty to warn the government under *Boyle*'s third prong is conceptually separate from any state-law products liability claim based on failure to warn product users.⁶⁷

III. THE BREADTH OF THE GOVERNMENT CONTRACTOR DEFENSE

A. *When Does a Significant Conflict Exist Between an Identifiable Federal Policy or Interest and the Operation of State Law?*

The *Boyle* Court explained when displacement of state law in favor of federal interests is appropriate:

Displacement will occur only where, as we have variously described, a "significant conflict" exists between an identifiable "federal policy or interest and the [operation] of state law," or the application of state law would "frustrate specific objectives" of federal legislation.⁶⁸

Boyle did not make clear, however, whether the defense it recognized as displacing state product liability law was a "government

⁶² *Carley v. Wheeled Coach*, 991 F.2d 1117, 1127 (3d Cir. 1993).

⁶³ *Wisner v. Unisys Corp.*, 917 F. Supp. 1501, 1511 (D. Kan. 1996).

⁶⁴ *McCoy v. Unisys Corp.*, No. CIV.A.H-95-1487, 1996 WL 186085, at *5 (S.D. Tex. Jan. 16, 1996).

⁶⁵ *See Bynum v. FMC Corp.*, 770 F.2d 556, 577 (5th Cir. 1985).

⁶⁶ *See, e.g., Lewis v. Babcock Indus., Inc.*, 985 F.2d 83, 89 (2d Cir. 1993) (noting the government's reorder of cable for fighter jet after initiating a corrosion study).

⁶⁷ *See Tate v. Boeing Helicopters*, 55 F.3d 1150, 1156 (6th Cir. 1995) ("Warning the government of dangers arising from a specific design—the third condition of *Boyle*—does not encompass or state a failure to warn claim; it simply encourages contractors to provide the government with all the information required to soundly exercise its discretion"); *In re Joint E. & S. Dist. N.Y. Asbestos Litig.*, 897 F.2d 626, 631 (2d Cir. 1990) (recognizing that defense may be satisfied as to design defect while leaving manufacturer exposed for failure to warn under state law); *see also* June E. Wagner, Note, *Tate v. Boeing Helicopters: Government Contractors Increasingly At Risk Despite the Government Contractors Defense*, 23 N. KY. L. REV. 377, 389 & n.87 (1995).

⁶⁸ *Boyle v. United Techs. Corp.*, 487 U.S. 500, 507 (1988) (citations omitted) (alteration in original).

contractor defense" or a "military contractor defense." Justice Brennan both warned and predicted in his *Boyle* dissent:

Worse yet, the injustice will extend far beyond the facts of this case, for the Court's newly discovered Government contractor defense is breathtakingly sweeping. It applies not only to military equipment . . . but (so far as I can tell) to any made-to-order gadget that the Federal Government might purchase after pre-viewing plans⁶⁹

The Court's ambiguity was manifest. On one hand, the Court relied on cases outside the military context to identify the unique federal interests served by the defense⁷⁰ and seemed to imply broadly that harm to discretionary decisions in "Government procurement" were at risk without the defense.⁷¹ On the other hand, the Court also suggested that the discretionary interests to be protected were uniquely military:

We think that the selection of the appropriate design for military equipment to be used by our Armed Forces is assuredly a discretionary function within the meaning of this provision. . . . In sum, we are of the view that state law which holds Government contractors liable for design defects in military equipment does in some circumstances present a "significant conflict" with federal policy and must be displaced.⁷²

In addition, when announcing the three-part test, the Court specifically referred to the defense's application to "military equipment."⁷³ Significantly, while the Court suggested that the "outlines of" and "potential for" the defense were rooted in the discretionary function,⁷⁴ the Court also implied that its "scope" was narrowly limited to military equipment.⁷⁵

However, by specifically rejecting the *Feres*⁷⁶ doctrine as the intellectual underpinning of the defense, and instead grounding the de-

⁶⁹ *Id.* at 516 (Brennan, J., dissenting).

⁷⁰ *See id.* at 505-07. The Court cited, for example, *Yearsley v. W.A. Ross Construction Co.*, 309 U.S. 18, 20-21 (1940), which found no contractor liability for damage caused in construction of a government dam.

⁷¹ *See id.* at 511.

⁷² *Id.* at 511-12.

⁷³ *See id.* at 512.

⁷⁴ *See Boyle*, 487 U.S. at 511.

⁷⁵ *See id.* at 512.

⁷⁶ The *Feres* doctrine prevents suits for injuries to armed services personnel in the course of military service, holding that the government's sovereign immunity is not waived with respect to servicemen's injuries arising out of activities incident to their service. *See Feres v. United States*, 340 U.S. 135, 146 (1950). The scope of the *Feres* doctrine expanded in *Stencel Aero Engineering Corp. v. United States*, 431 U.S. 666

fense in the broad discretionary function of the Federal Tort Claims Act, the Court invited application of the defense beyond the military arena.⁷⁷ Under the Federal Tort Claims Act, the United States does not waive sovereign immunity for "claim[s] . . . based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused."⁷⁸ By its terms, the discretionary function provision is not limited to the military but applies broadly to the exercise of discretion by federal employees or federal agencies.

1. Does *Boyle* Prevent An Economic Detriment or Permit an Economic Windfall?

The competing policies at stake that defined the schism between the *Boyle* majority and dissent continue to boil among the circuits. The *Boyle* majority feared that without the defense, an inappropriate economic burden would be passed on to the government in the form of higher prices for products or, as an extreme consequence, that products would become unavailable because the costs of risk were too great.⁷⁹ The Court explained that imposing liability on its contractor defeated the economic advantage the government

(1977), where the Court held that a third party has no right to recover in an action for indemnity against the United States for damages it may be required to pay to injured servicemen. See *Stencel Aero*, 431 U.S. at 674.

The *Boyle* Court rejected *Feres* as the source of the defense because it was, at once, too broad and too narrow. The Court explained, as to its unreasonable broadness: "Since *Feres* prohibits all service-related tort claims against the Government, a contractor defense that rests upon it should prohibit all service-related tort claims against the manufacturer—making inexplicable the three limiting criteria for contractor immunity" *Boyle*, 487 U.S. at 510. As to *Feres*'s unreasonable narrowness, the Court explained, "it could not be invoked to prevent, for example, a civilian's suit against the manufacturer of fighter planes, based on a state tort theory" *Id.* at 510-11.

⁷⁷ On occasion, manufacturers produce defense products pursuant to an official government order issued under the Defense Production Act. It is usually invoked as a method of mobilizing private companies to the production of essential materials for a military effort. In such a case, the contractors are entitled to some immunities as yet undetermined in scope. See *Hercules Inc. v. United States*, 116 S. Ct. 981, 989 n.14 (1996) ("We need not decide the scope of § 707 [of the Defense Production Act of 1950] in this case because it clearly functions only as an immunity, and provides no hint of a further agreement to indemnify"). The *Boyle* defense is separate and more generally applicable.

⁷⁸ 28 U.S.C. § 2680(a) (1994 & Supp. 1997).

⁷⁹ See *Boyle*, 487 U.S. at 511-12; see also Joel Slawotsky, *The Expansion of the Government Contractor Defense*, 31 TORT & INS. L.J. 929, 945 (1996) ("The view that the government contractor defense is limited solely to military equipment is not compatible with the rationale for the defense").

derived from its discretionary immunity. "It makes little sense to insulate the Government against financial liability for the judgment that a particular feature of military equipment is necessary when the Government produces the equipment itself, but not when it contracts for the production."⁸⁰ On the other hand, Justice Brennan argued that the Court's economic justifications for the defense were not compelling in military contracts or otherwise and that any rule of law in this context and however fashioned should be made by Congress.⁸¹ Justice Brennan concluded that the indirect burdens of passed-on costs have not traditionally been the basis for shielding third parties from liability.⁸²

Despite the dissent's premise that the burden of indirect costs on the government do not ever compel excusing the contractor, the case for a narrow military contractor defense is justifiable.⁸³ Judicial deference to military and national-defense decisions is well-rooted in judicial opinions.⁸⁴ Although the majority could not "prove"⁸⁵ that some contractors would otherwise refuse work out of fear of liability,

⁸⁰ *Boyle*, 487 U.S. at 512.

⁸¹ See *id.* at 527 (Brennan, J., dissenting); see also Barry Kellman, *Judicial Abdication of Military Tort Accountability: But Who Is To Guard The Guards-Themselves?*, 1989 DUKE L.J. 1597, 1647-48 (1989) (criticizing *Boyle* and arguing that the courts have abdicated their judicial responsibility to review civil matters involving the military).

⁸² See *Boyle*, 487 U.S. at 527 (Brennan, J., dissenting) ("[N]o authority for the proposition that burdens imposed on Government contractors, but passed on to the Government, burden the Government in a way that justifies extension of its immunity").

⁸³ This is not to say that soldiers' lives are less valuable. As one court stated: Young servicemen . . . represent the very best of our Nation's citizens. Americans take pride in their bravery and skill, and mourn when their lives are tragically lost. The pilots and crews of military aircraft willingly embrace the risks that they assume by volunteering to serve our country. They are not the "military doubles of civilian motorists," or ordinary purchasers of consumer products. . . . Although the defense may sometimes seem harsh in its operation, it is a necessary consequence of the incompatibility of modern products liability law and the exigencies of national defense.

Harduvel v. General Dynamics Corp., 878 F.2d 1311, 1322 (11th Cir. 1992).

⁸⁴ See, e.g., *Chappell v. Wallace*, 462 U.S. 296, 300 (1983) (opining that court should "hesitate long" before interfering in chain of command); *Gilligan v. Morgan*, 413 U.S. 1, 11-12 (1973) (noting reluctance to interfere with National Guard decision concerning equipping, staffing, and training military force); *Doe v. Sullivan*, 938 F.2d 1370, 1380 (D.C. Cir. 1991) ("[D]eference is owed to the political branches in military matters").

⁸⁵ See *Boyle*, 487 U.S. at 527 (Brennan, J., dissenting) ("Even granting the Court's factual premise, which is by no means self-evident, the Court cites no authority for the proposition that burdens imposed on Government contractors . . . justifies extension of its immunity").

or that costs would make weaponry unavailable, the unproven fear alone justifies the defense in light of traditional judicial deference to military matters.⁸⁶ In addition, military weaponry and equipment are often necessarily dangerous to soldiers and civilians. The line between *defective* and *effective* blurs when one considers basic military purposes. The prospect of liability for the manufacture of military weaponry and equipment may pose staggering liability risks in light of the intended military purposes the products serve.⁸⁷ Finally, the risk of public revelations about the manufacture of military equipment associated with product-liability lawsuits could conceivably jeopardize national defense and security.⁸⁸ Of note, although *Boyle* involved an injury to a soldier, when the defense is invoked—even if it is limited to military equipment—it precludes injured civilians as well as soldiers from recovering compensation for injuries.⁸⁹

Outside of the military arena, the prospect that a product may be unavailable or cost more because of risks associated with its use raises significantly less compelling concerns. The availability and price of an item is a normal, common, and hardly unique federal interest. Put simply, the threat of an increased economic burden is unpersuasive.⁹⁰ In fact, *Boyle* failed to recognize that the government

⁸⁶ See, e.g., *United States v. Stanley*, 483 U.S. 669 (1987) (administration of LSD to soldier); *United States v. Shearer*, 473 U.S. 52 (1985) (failure to control dangerous soldier). But see Kevin J. Dalton, Comment, *Gulf War Syndrome: Will the Injuries of Veterans and Their Families Be Redressed?*, 25 U. BALT. L. REV. 179, 201-08 (1996); Mary J. Davis, *The Supreme Court and Our Culture of Irresponsibility*, 31 WAKE FOREST L. REV. 1075, 1096 (1996) (questioning economic impact of absence of the defense); Kellman, *supra* note 81, at 1603-04.

⁸⁷ Justice Brennan expressed skepticism that the unavailability of weaponry was the majority's overriding concern. Instead, he viewed the defense as economically based. "The erosion [of discretion] the Court fears apparently is rooted not in a concern that suits against Government contractors will prevent them from designing, or the Government from commissioning the design of, precisely the product the Government wants, but in the concern that such suits might preclude the Government from purchasing the desired product at the price it wants" *Boyle*, 487 U.S. at 527 (Brennan, J., dissenting).

⁸⁸ See *Bentzlin v. Hughes Aircraft Co.*, 833 F. Supp. 1486, 1495-96 (C.D. Cal. 1993) (noting the government's assertion of state-secrets privilege, invoked because disclosure would be harmful to national security, precluded adjudication of manufacturing-defect claim against manufacturer of missile that malfunctioned during Persian Gulf War).

⁸⁹ See *In re Aircraft Crash Litig. Frederick, Md.*, 752 F. Supp. 1326, 1336 (S.D. Ohio 1990) (explaining that, in case of civilians injured in military aircraft, defense applies to "claims brought against military contractors by or on behalf of civilians").

⁹⁰ See Jack M. Sabatino, *Privatization and Punitives: Should Government Contractors Share the Sovereign's Immunities From Exemplary Damages?*, 58 OHIO ST. L.J. 175, 238-39 (1997) (noting deterrence effect and urging that government contractors not be shielded from punitive damage awards).

suffers substantial economic consequences as a result of a faulty design that it cannot recover elsewhere.⁹¹ Thus, outside the military, the generally accepted tort goals of safer product design, deterrence, and compensation serve the federal government just as aptly as they serve the general marketplace.

There is a facile attractiveness to the argument that it is unfair to impose the economic burden of tort liability upon the manufacturer when a culpable government tortfeasor is immune from suit.⁹² After all, the product was manufactured at the behest of the government, with government design approval, and some alleged government fault.⁹³ The apparent unfairness arises because federal law prevents the manufacturer from recovering these costs from the government at the end of the lawsuit through contribution or indemnity.⁹⁴

It is not particularly unique, however, that one tortfeasor is insulated from liability for one reason or another while the other should

⁹¹ For example, in the case of a fatal injury to a pilot, among other things (including loss of morale and public confidence), the government loses its human resource, its investment in training, and the aircraft. It also bears the cost of the veteran or worker compensation claim. A catastrophic civilian accident also costs the government when it serves as the "safety net" for medical and social services to the disabled. The outcome, therefore, is that while the manufacturer is able to avoid paying damages, the government still pays for damages outside of tort, and the victim is inadequately compensated.

⁹² See *Mitchell v. Lone Star Ammunition, Inc.*, 913 F.2d 242, 245 (5th Cir. 1990) ("It would be inherently unfair to expose a manufacturer to liability for a defective design that the Government not only specified, but knew was defective").

⁹³ See *Trevino v. General Dynamics Corp.*, 865 F.2d 1474, 1478 (5th Cir. 1989) (the purpose of the defense is to "prevent the contractor from being held liable when the government is actually at fault").

⁹⁴ The government is immune from suit because the officers exercised discretion in the approval of the design and thus the United States has not waived its sovereign immunity. Therefore, no contribution can be had against the government as a joint tortfeasor. In addition, the government cannot generally indemnify its contractors under the Anti-Deficiency Act. See 31 U.S.C. § 1341(a)(1) (1983 & Supp. 1997) ("[O]fficer or employee of the United States Government . . . may not (A) make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation; or (B) involve either government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law"); *Hercules Inc. v. United States*, 116 S. Ct. 981, 985, 987 (1996) (determining that Agent Orange manufacturers may not recover from the federal government for tort settlement with injured victims because no express or implied-in-fact indemnity provisions are permitted to cover manufacturer's liability in tort to claimants); *Wagner*, *supra* note 67, at 406-07 (noting unfairness). If a manufacturer breaches its contract to the government, it remains liable to the government for its design defects. See Mark S. Jaeger, *Contractor Liability for Design Defects Under the Inspection Clause: Latent Design Defects—A Sleeping Giant?*, 21 PUB. CONT. L.J. 331, 331-32 (1991).

ders the burden despite an apparent unfairness.⁹⁵ Worker compensation law, for example, provides an instance where one tortfeasor is immune from suit despite its fault.⁹⁶ Generally, an employer bears no tort liability in exchange for modest worker protection for workplace injuries without regard to fault. The employer's immunity from suit often forces the manufacturer to absorb the lion's share of tort liability, but that burden⁹⁷ has not resulted in the repeal of worker compensation laws.⁹⁸ Somewhat similarly, under traditional joint and several liability tort law, it is common for deep-pocket tortfeasors to bear a disproportionate share of damages apportioned to other tortfeasors. In short, tort law has always been imperfect in its allocations among tortfeasors; however, it remains superior to leaving the risk to the injured victim.⁹⁹ Placing a disproportionate share of liability on the manufacturer is not inconsistent with tort outcomes generally.

⁹⁵ Under the current tort system, it is not unfair to ask the manufacturer to shoulder the cost of injuries regardless of its negligence. The concept that the manufacturer is best able to internalize such external costs as personal injury is the premise of strict liability. See *supra* note 7 for citation to authorities examining deterrence and compensation goals of risk allocation through tort liability.

⁹⁶ In cases involving federal employees, the government enjoys protection under federal worker compensation law, which is the employees' exclusive remedy. See Federal Employees Compensation Act, 5 U.S.C. §§ 8116(c), 8173 (1996).

⁹⁷ See *Boyle v. United Techs. Corp.*, 487 U.S. 500, 530 (1988) (Brennan, J., dissenting).

⁹⁸ Under state workers' compensation laws, for example, the employer/tortfeasor cannot be sued by the employee, and in the majority of states, absent an express indemnity agreement, the employer cannot be liable to a third party seeking contribution or indemnity. See, e.g., *Kennedy v. Shuwa Inv. Corp.*, 825 F. Supp. 712 (E.D. Pa. 1993); *E.W. Bliss Co. v. Superior Court*, 258 Cal. Rptr. 783 (Cal. Ct. App. 1989); *Diamond State Tel. Co. v. University of Del.*, 269 A.2d 52 (Del. 1970); *Kamali v. Hawaiian Elec. Co.*, 504 P.2d 861 (Haw. 1972); *Harter Concrete Prods., Inc. v. Harris*, 592 P.2d 526 (Okla. 1979); *Tsarnas v. Jones & Laughlin Steel Corp.*, 412 A.2d 1094 (Pa. 1980); *Seattle First Nat'l Bank v. Shoreline Concrete Co.*, 588 P.2d 1308 (Wash. 1978); cf. *Lambertson v. Cincinnati Corp.*, 257 N.W.2d 679, 684, 689 (Minn. 1977) (it may seem unfair to require a third party to "bear the burden of a full common-law judgment despite possibly greater fault on the part of the employer" and permitting contribution "not to exceed its total workers' compensation liability to plaintiff"). See generally Joel E. Smith, Annotation, *Modern Status of Effect of State Workmen's Compensation Act on Right of Third-Person Tortfeasor to Contribution or Indemnity From Employer of Injured or Killed Workman*, 100 A.L.R.3d 350 (1980). Expecting the federal government to pay a fixed sum for risk at the outset of the contract does not defeat sovereign-immunity principles. Sovereign immunity is defeated, however, by forcing the government to defend against *ex post* losses.

⁹⁹ Justice Brennan argued in *Boyle* that even if "tort liability is an inefficient means of ensuring the quality of design efforts," it was for Congress, not the Court, to reconfigure tort policy. *Boyle*, 487 U.S. at 530 (Brennan, J., dissenting).

Boyle correctly assumed that contractors who may suffer later liability will pass on the cost of that risk to the government *ex ante*. As the *Boyle* Court noted, incorporating the cost of liability into the product undermines the economic advantage the government would enjoy if it made the product itself and asserted its immunity from suit in defense of liability claims after the fact.¹⁰⁰ However, paying the cost of potential injuries through passed-on costs or paying for redesign of the product is not necessarily an unfavorable outcome.¹⁰¹ Furthermore, rather than comparing the effect of manufacturing the product in-house as opposed to out-sourcing, the Court in *Boyle* could have as easily focused on the illogical effect of granting the defense to manufacturers working from government specifications when no such immunity results for defective off-the-rack purchased goods. As one jurist pointed out, the price of every commercially available product the government purchases carries the attendant costs of potential product-liability exposure. The government pays the manufacturer's contingent liability as part of the sticker price in an off-the-rack purchase. There is little justification for the defense's economic benefit to the government when the government is at fault considering that it pays these costs when it is faultless:

Indeed, the cost theory relied on by the majority proves too much, for every time the government purchases a product made in the private sector, potential liability costs (factored into the price) are passed on to the government. While I agree with the majority that "[t]he government would suffer this economic harm regardless of whether it procured a product for military or civilian use," the likelihood that the government will bear indirectly the liability costs of the products it procures from the pri-

¹⁰⁰ See *id.* at 512. Even when the government manufactures a product in-house, however, the risk is not "costless." As discussed *supra*, note 91, the government loses its human and product investment and pays for injuries outside of the tort compensation system.

¹⁰¹ See *Carley v. Wheeled Coach*, 991 F.2d 1117, 1131 (3d Cir. 1993) (Becker, J., concurring and dissenting); cf. David G. Owen, *The Moral Foundations of Product Liability Law: Toward First Principles*, 68 NOTRE DAME L. REV. 427, 506 (1993) (endorsing fault-based product liability principles). See generally Ronald A. Cass & Clayton P. Gillette, *The Government Contractor Defense: Contractual Allocation of Public Risk*, 77 VA. L. REV. 257 (1991); Kellman, *supra* note 81; Schwartz, *supra* note 7, at 412 ("[A]t the least, liability has accelerated safety: tort verdicts have led manufacturers to immediately implement design changes that would have probably been implemented at later dates"); Ellen Wertheimer, *Unavoidably Unsafe Products: A Modest Proposal*, 72 CHI.-KENT L. REV. 189 (1996) (endorsing risk/loss-spreading function of products liability law).

vate sector does not justify the displacement of state law with a sweeping rule of federal common law.¹⁰²

The illogic of the defense thus compared is apparent. When the government buys something "off-the-rack" it pays for the risks of defective design even though the government has no fault and did not participate in the design. Yet the government contractor defense shields the manufacturer and protects the government from those risk-spreading costs when the government did have a hand in the design and is at fault. When the economic harm is measured from the government's perspective, the defense makes little sense.

Perhaps the most compelling reason to apply *Boyle* judiciously derives from the decision to use a tort system to compensate victims injured by defective products. A fundamental principle of the tort system is that risk of injury should be borne by those with the best ability to manage the risk by safeguarding against injury or bearing its cost.¹⁰³ In this instance, the least appropriate party upon whom to place the risk of loss for a design defect (among the government, the manufacturer, and the victim) is the victim.¹⁰⁴ Yet this is where the

¹⁰² *Carley*, 991 F.2d at 1132 (Becker, J., concurring and dissenting) (citation omitted) (alteration in original).

¹⁰³ As Justice Brennan observed, dissenting in *Boyle*:

The tort system is premised on the assumption that the imposition of liability encourages actors to prevent any injury whose expected cost exceeds the cost of prevention. If the system is working as it should, Government contractors will design equipment to avoid certain injuries (like the deaths of soldiers or Government employees), which would be certain to burden the Government. The Court therefore has no basis for its assumption that tort liability will result in a net burden on the Government (let alone a clearly excessive net burden) rather than a net gain.

Boyle, 487 U.S. at 530 (Brennan, J., dissenting); see also Owen, *supra* note 101, at 488-92; Wertheimer, *supra* note 101, at 192-93 n.15 (arguing that purpose of strict liability is to spread cost of injuries more than to encourage development of safer products). See generally Robert J. Staaf & Bruce Yandle, *Common Law, Statute Law, and Liability Rules*, in THE ECONOMIC CONSEQUENCES OF LIABILITY RULES: IN DEFENSE OF COMMON LAW LIABILITY 11 (Roger E. Meiners & Bruce Yandle eds., 1991) [hereinafter COMMON LAW LIABILITY]; Richard A. Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645 (1985); Rabin, *supra* note 7; Schwartz, *supra* note 7, at 443; Garry T. Schwartz, *The Beginning and the Possible End of the Rise of Modern American Tort Law*, 26 GA. L. REV. 601 (1992).

¹⁰⁴ *Boyle* is particularly onerous to tort victims not employed by the federal government. For example, federal employees enjoy some recovery for work-related injuries under the Federal Employees Compensation Act, see 5 U.S.C. §§ 8101-8193 (1996 & Supp. 1997), and veterans enjoy some recovery under the Veterans' Benefits Act, see 38 U.S.C. §§ 101-8527 (1991 & Supp. 1997). Victims not employed by the federal government, however, receive no such protection. See generally Wertheimer, *supra* note 101, at 198 (injured victim is the least appropriate loss-bearer in product liability cases). If defectively designed government equipment

Boyle decision places that burden of risk. *Boyle* displaced tort law and left nothing in its stead to fill the gaping hole.

Finally, the Court's concern that the manufacturer might pass on the cost of the risk of liability to the government and thereby erode the discretionary function is not well conceived considering government-procurement practices generally. The government has often been willing to bear certain risks through pricing under its contracts. In construction work, contractors build in the costs of insurance, performance bonds, and other risks into every government contract.¹⁰⁵ The government has traditionally been willing to fairly allocate risks associated with construction work through its procurement laws.¹⁰⁶ Allocating the risk of third-party liability can be accomplished without thwarting sovereign immunity by pricing products to reflect a product's true price—including the cost of injury to third persons.¹⁰⁷

2. Does *Boyle* Protect or Undermine the Federal Officer's Exercise of Discretion?

Boyle's second justification for the defense, preserving the government's interest in protecting a federal officer's discretionary acts, is also diminished outside of military procurement. As the Court noted in *Boyle*, the design of military equipment "often involves . . . the balancing of many technical, military, and even social considerations, including specifically the trade-off between greater safety

injures nonfederal civilians, there is no source from which to recover at all. See Margaret M. Severson, *Defense Industry—1 Injured Parties—0: Rights-Limiting Ethical Problems with Boyle and the Government Contractor Defense*, 21 PUB. CONT. L.J. 572, 588-92 (1992) (suggesting that *Boyle* results in an unfair outcome for victims).

¹⁰⁵ See GEORGE EDSON MASON, A QUANTITATIVE RISK MANAGEMENT APPROACH TO THE SELECTION OF CONSTRUCTION CONTRACT PROVISIONS 28-32 (1978) (unpublished Ph.D. dissertation, Stanford University) (on file with the *Seton Hall Law Review*) (noting that government recognizes that risk is best assigned to the party who can best manage the risk); Raymond E. Levitt et al., *Allocating Risk and Incentive in Construction*, 106 J. CONSTRUCTION DIVISION 297, 298-99 (1980) (noting United States Department of Transportation concern that misallocation of construction risks upon contractors may interfere with ability to construct).

¹⁰⁶ See Carl A. Erikson et al., Preliminary Investigations of Risk Sharing In Construction Contracts 16 (U.S. Army Construction Eng'g Research Lab. Apr. 1978) (Rep. No. CERL-IR-P-88) (on file with the *Seton Hall Law Review*) (observing that government contracts reflect allocation of risks between government and contractor); Gene Ming Lee, *A Case For Fairness in Public Works Contracting*, 65 FORDHAM L. REV. 1075, 1115-21 (1996) (arguing that government should bear unforeseen risks in public works contracts); Severson, *supra* note 104, at 589 (stating that, prior to *Boyle*, government willingly accepted pass-through costs).

¹⁰⁷ See Davis, *supra* note 86, at 1097 (opining *Boyle* ignores the "greater costs in human life and limb" of product liability).

and greater combat effectiveness."¹⁰⁸ Put simply, national security and defense interests are far more compelling than other federal interests.¹⁰⁹ What purpose, outside of national security, justifies denying compensation to a victim when a government officer and a manufacturer together determine to forsake public safety in order to secure a cheaper product?¹¹⁰

The *Boyle* test indulges the fiction that federal officers engage in informed risk-benefit analysis (including the cost of human injury) associated with design and procurement of manufactured goods. However, while *Boyle* assures that contractors will reveal all known risks to the government, *Boyle* provides no incentive for federal officers to engage in a risk-benefit analysis because, under *Boyle*, the cost of injury is not a risk factor that needs to be considered in pricing or design.¹¹¹ A non-military government officer would engage in a more informed risk-benefit analysis if forced to choose whether to pay for the risk of injury through the passed-on costs of anticipated litigation or the passed-on costs of product redesign. By considering external costs associated with personal injury, the federal officer actually engages in informed discretionary approval of specifications for designs. Instead, *Boyle* allows the federal officer to ignore external costs

¹⁰⁸ *Boyle*, 487 U.S. at 511; see also *Bentzlin v. Hughes Aircraft Co.*, 833 F. Supp. 1486, 1492 (C.D. Cal. 1993) (noting that where war-time national interests are at stake, the government often makes trade-offs between product quality, price, and time of production); Dalton, *supra* note 86, at 228 (arguing that veterans should be better compensated by government for Gulf War Syndrome, but recognizing that the *Feres* doctrine is necessary to prevent judicial interference with military effectiveness).

¹⁰⁹ See *Carley v. Wheeled Coach*, 991 F.2d 1117, 1131 (3d Cir. 1993) (Becker, J., concurring and dissenting).

¹¹⁰ See Davis, *supra* note 86, at 1098 (claiming that the government contractor defense overprotects discretionary function).

¹¹¹ Two pre-*Boyle* cases demonstrate factually why *Boyle* is particularly and uniquely appropriate in military equipment cases. In *Brown v. Caterpillar Tractor Co.*, 696 F.2d 246 (3d Cir. 1982), a reservist sued for injuries suffered when operating a bulldozer that lacked a canopy or roll bar. The court explained that the military desired a completely unobstructed view as a combat function and intended that a rifle case could be mounted on the bulldozer. See *id.* at 254-55. In *Sanner v. Ford Motor Co.*, 144 N.J. Super. 1, 364 A.2d 43 (App. Div. 1976), plaintiff suffered injuries when a "jeep" without a roll bar or seat belts overturned. The army viewed seat belts as deterring "egress and escape in tactical situations as well as enhancing injuries in the event of a roll-over." *Id.* at 6, 364 A.2d at 45-46. Likewise, the roll bar "compromised some of the intended uses of the vehicle." *Id.*, 364 A.2d at 46. These cases demonstrate the sort of risk-benefit analysis that is justifiably indulged and protected by *Boyle* in the military context.

without recognizing their impact on the federal government and the public.¹¹²

B. The Ninth Circuit: Significant Conflict Between State and Federal Procurement Law Only Exists With Regard To Military Equipment

Following *Boyle*, the Ninth Circuit carefully weighed *Boyle*'s governmental and economic policy considerations against important state-law interests served by tort liability and held that the government contractor defense adopted by the United States Supreme Court in *Boyle* is inapplicable outside of military contracts.¹¹³ It did so by reading *Boyle* to require a threshold inquiry as to the significance of the conflict between the federal interests at risk and state law prior to mechanically applying *Boyle*'s three-part test. It created still greater distance from its sister circuits when it declined to find such conflict even within the military context unless the item was manufactured principally for a military, and not commercial, purpose.¹¹⁴ In addition, the Ninth Circuit has ruled that *Boyle* only applies in failure-to-warn cases where compliance with government specifications precluded the manufacturer's compliance with state-law duties to warn or substantially conflicted with those state-law duties.¹¹⁵ These rulings properly assure narrow application of *Boyle*. They also signal the Ninth Circuit's general willingness to respect state tort law's role in determining the conduct of private parties.

*Nielsen v. George Diamond Vogel Paint Co.*¹¹⁶ demonstrates the Ninth Circuit's reasoning. In *Nielsen*, Ronald Nielsen, a civilian employee of the Army Corps of Engineers, filed suit against the manu-

¹¹² See *supra* note 91 for a discussion of why *Boyle* allows a federal officer to ignore external costs without recognizing their impact on the federal government and the public.

¹¹³ The Second Circuit has not decided whether the defense is applicable outside the military. See *In re Chateaugay Corp.*, 146 B.R. 339, 349-51 (Bankr. S.D.N.Y. 1992) (holding that the defense is inapplicable to manufacturer of postal vehicle), *ruling questioned in later proceedings*, 201 B.R. 48, 69 (Bankr. S.D.N.Y. 1996) (stating that applicability of *Boyle* to nonmilitary contracts is undecided in Second Circuit—but noting trend toward nonmilitary applicability). The Second Circuit has, however, found the defense applicable in shipyard asbestos exposure cases. See *In re Brooklyn Navy Yard Asbestos Litig.*, 971 F.2d 831, 839 (2d Cir. 1992). This ruling is at odds with *In re Hawaii Federal Asbestos Cases*, 960 F.2d 806 (9th Cir. 1992).

¹¹⁴ See *Hawaii Fed. Asbestos Cases*, 960 F.2d at 812-13 (concluding that asbestos insulation used in the manufacture of naval ships was not subject to military contractor defense because the same insulation was marketed to other commercial buyers and was not manufactured with the special needs of the military in mind).

¹¹⁵ See *id.* at 813.

¹¹⁶ 892 F.2d 1450 (9th Cir. 1990).

facturers of paint he used during the course of painting a dam.¹¹⁷ Nielsen alleged that paint exposure resulted in disabling physical and psychiatric symptoms. He was eventually diagnosed as suffering "solvent-induced brain damage."¹¹⁸ The district court granted summary judgment in favor of the manufacturers, concluding that the design of the paint and its warnings were the result of United States Government specifications and they were therefore protected from suit under Idaho state law.¹¹⁹ The case provided the Ninth Circuit its first opportunity to apply *Boyle*, which was decided between the district court decision and the appellate decision in *Nielsen*.

The appellate court concluded that *Boyle* had no applicability beyond the manufacture of military equipment. The court rejected the argument that the Supreme Court's rejection of the *Feres-Stencel* doctrine as a basis for immunity and its reliance of the Federal Tort Claims Act expanded the government contractor defense to potentially all government contracts. The Ninth Circuit narrowly held that although *Boyle* delineated the outlines of the defense as the discretionary function immunity of federal employees, the scope of the displacement was limited to instances where military objectives could be undermined by an imposition of state law.¹²⁰ The Ninth Circuit rejected the defendant's argument that *Boyle*'s broad reliance on discretion and rejection of the *Feres-Stencel* doctrine as the underpinning of the government contractor defense mandated broad applicability beyond the military:

Accordingly, the Supreme Court's decision in *Boyle* altered the scope of the so-called "military contractor defense" available as a matter of federal law in diversity actions against military contractors; it also changed the intellectual mooring of that defense from the *Feres* doctrine to the discretionary function exemption of the Federal Tort Claims Act. Yet the policy behind the defense remains rooted in considerations peculiar to the military.¹²¹

The court declined to hold that every time the discretionary function of the Federal Tort Claims Act is implicated in the initial decisions between contractor and officer the contractor should enjoy immunity. Instead, the Ninth Circuit examined *Boyle*'s underlying policies and concluded that the imposition of state-law liability in this instance would not "create a 'significant conflict' with federal

¹¹⁷ See *id.* at 1451.

¹¹⁸ *Id.*

¹¹⁹ See *id.*

¹²⁰ See *id.* at 1454.

¹²¹ *Id.* at 1454-55.

policy.”¹²² “[W]e deal with a civilian worker injured in the course of a civilian job involving a product designed to further civilian, rather than military, objectives.”¹²³ In fact, the Ninth Circuit went so far as to call the *Boyle* defense the “military contractor defense,” eschewing the broader “government contractor defense” denomination.¹²⁴

After *Nielsen*, the Ninth Circuit revisited *Boyle* in the context of asbestos injuries suffered by Naval shipyard workers and limited the defense even further. In *In re Hawaii Federal Asbestos Cases*,¹²⁵ the production of Navy ships was unquestionably performed under a contract with the military, and the ships would qualify as military equipment. Nevertheless, the Ninth Circuit considered whether application of *Boyle* was “consistent with the purposes the Court ascribes to that defense.”¹²⁶ Without reaching *Boyle*’s three-part inquiry, the court concluded as a threshold matter that no federal interests were sufficiently in conflict with state law to justify displacement of state tort law.¹²⁷

The court focused particularly on asbestos’s commercial applications beyond the military. The court noted that the military was a “relatively insignificant purchaser of [asbestos] products that were primarily designed for applications by private industry.”¹²⁸ The court reasoned that because these “were not specialized items of military equipment but were, instead, goods sold on the ordinary commercial market,” the defense should not shield the manufacturer, even if the product was designed to federal specifications.¹²⁹

Just as *Boyle* justified the existence of the defense upon potential economic harm to the government, *In re Hawaii Asbestos Cases* justified the rejection of the defense on the basis that neither the government nor the manufacturer suffered any economic harm without the defense in this case.¹³⁰

¹²² *Nielsen*, 892 F.2d at 1455.

¹²³ *Id.*

¹²⁴ *See id.* at 1454.

¹²⁵ 960 F.2d 806 (9th Cir. 1992).

¹²⁶ *Id.* at 811.

¹²⁷ *See id.* at 812.

¹²⁸ *Id.*

¹²⁹ *See id.*

¹³⁰ The government often sells its old merchandise as surplus and places these products into the stream of commerce. Unbeknownst to the purchasing public, these products lack the state-law product liability protections of other merchandise. The defense, therefore, has far-reaching effects on ordinary consumers unconnected with any federal activities. In addition, when the federal government sells products as surplus and the consumer cannot look to either the manufacturer or the government for product-liability recovery, both the manufacturer and the gov-

The products have not been developed on the basis of involved judgments made by the military but in response to the broader needs and desires of end-users in the private sector. The contractors, furthermore, already will have factored the costs of ordinary tort liability into the price of their goods. That the contractors will not enjoy immunity from tort liability with respect to the goods sold to one of their customers, the Government, is unlikely to affect their marketing behavior or their pricing.¹³¹

The Ninth Circuit's decisions reflect adherence to both the test and the policies underlying *Boyle*. As the next section demonstrates, by focusing their attention only upon the *Boyle* test, other circuits have forsaken the underlying principles at stake.

C. *Applying Boyle in Nonmilitary Cases*

1. The Design and Manufacture of the United States Postal Service's Multiple Position Letter Sorting Machine

Other jurisdictions liberally extend the government contractor defense to nonmilitary contractors.¹³² In this section, the application

ernment enjoy an unfair commercial advantage not available to other manufacturers. Cf. *Glassco v. Miller Equip. Co.*, 966 F.2d 641, 644 (11th Cir. 1992) (denying recovery to civilian who purchased surplus leather tree-trimming belt originally manufactured for the military); *Skyline Air Serv., Inc. v. G.L. Capps Co.*, 916 F.2d 977, 980 (5th Cir. 1990) (denying recovery to insurer as subrogee of owner of former military helicopter sold as surplus and operated by civilian pilot during a subsequent logging operation).

¹³¹ *Hawaii Fed. Asbestos Cases*, 960 F.2d at 811. Cf. *Butler v. Ingalls Shipbuilding, Inc.*, 89 F.3d 582, 585 (9th Cir. 1996) (finding that a shipboard ladder is military equipment conforming to extremely precise specifications).

¹³² Summarizing the defense's status in the circuits: No courts in the First Circuit have ruled whether the defense extends to nonmilitary products. While, the Second Circuit has not ruled definitively, it has implied that military interests are unique. See *Lewis v. Babcock Indus., Inc.*, 985 F.2d 83, 87 (2d Cir. 1993) (calling it the "military contractor defense"). On the other hand, the Second Circuit has applied the defense to Navy shipyard asbestos exposure, suggesting its disagreement with the Ninth Circuit. See *In re Brooklyn Navy Yard Asbestos Litig.*, 971 F.2d 831, 839 (2d Cir. 1992). A lower court in the Second Circuit has suggested the defense is applicable outside the military context. See *In re Chateaugay Corp.*, 146 B.R. 339, 349-51 (Bankr. S.D.N.Y. 1992) (holding the defense is inapplicable to manufacturer of postal vehicle—as well as outside the military context in general), *ruling questioned in later proceedings*, 201 B.R. 48, 69 (Bankr. S.D.N.Y. 1996) (stating that applicability of *Boyle* to nonmilitary contracts is undecided in the Second Circuit—but noting trend toward nonmilitary applicability). The Third Circuit has ruled that the defense is available to nonmilitary contractors. See *Carley v. Wheeled Coach*, 991 F.2d 1117, 1118 (3d Cir. 1993). The Fourth Circuit has also applied *Boyle* to nonmilitary contractors. See *Mangold v. Analytic Servs., Inc.*, 77 F.3d 1442, 1448 (4th Cir. 1996) (concluding that the defense shields contractor from state-law claim

of the defense to the manufacture of one product for the United States Postal Service illustrates the danger of construing *Boyle* broadly.

Numerous postal workers across the country working at Multiple Position Letter Sorting Machines (MPLSM) for the United States Postal Service have filed suits against Unisys Corporation, the successor to Burroughs Corporation, alleging that the ergonomic design defects of the MPLSMs caused injuries to their hands, wrists, and arms such as repetitive-stress injury, carpal tunnel syndrome, numb-

for libel and slander during government investigation); *Yeroshefsky v. Unisys Corp.*, 962 F. Supp. 710, 711 (D. Md. 1997) (holding government contractor defense applicable to nonmilitary contracts); *Richland-Lexington Airport Dist. v. Atlas Properties, Inc.*, 854 F. Supp. 400, 421-23 (D.S.C. 1994) (determining that defense applies to landowner claim against clean-up company doing work for the EPA). The Fifth Circuit has not yet ruled on the precise issue, but language in cases suggest it recognizes a military contractor defense. See *Stout v. Borg-Warner Corp.*, 933 F.2d 331, 334 (5th Cir. 1991) (extending defense to "military equipment"). On the other hand, a lower court within the Fifth Circuit extended the defense to a nonmilitary service contract. See *Guillory v. Ree's Contract Serv., Inc.*, 872 F. Supp. 344, 346 (S.D. Miss. 1994). Similarly, a lower court within the Sixth Circuit applied *Boyle* to a service contract for the operation of a uranium plant. See *Lamb v. Martin Marietta Energy Sys.*, 835 F. Supp. 959, 966 (W.D. Ky. 1993). Even prior to *Boyle*, the Seventh Circuit extended the defense to nonmilitary contracts. See *Boruski v. United States*, 803 F.2d 1421, 1430 (7th Cir. 1986) (relying on state law); see also *Johnson v. Grumman Corp.*, 806 F. Supp. 212, 217 (W.D. Wis. 1992) (applying defense to case involving postal vehicle). A lower court in the Eighth Circuit applied *Boyle* to nonmilitary contracts. See *Schmid v. Unisys Corp.*, No. 4:95CV00864, 1996 WL 421843, at *17 (E.D. Mo. July 24, 1996). Lower courts within the Tenth Circuit have also extended the defense to nonmilitary contracts. See *Andrew v. Unisys Corp.*, 936 F. Supp. 821, 829-30 (W.D. Okla. 1996) (holding government contractor defense applicable to manufacture of letter-sorting machine for United States Postal Service); *Wisner v. Unisys Corp.*, 917 F. Supp. 1501, 1509 (D. Kan. 1996) (applying government contractor defense to nonmilitary contracts). The Eleventh Circuit ruled prior to *Boyle* that the defense extends to nonmilitary contractors. See *Burgess v. Colorado Serum Co.*, 772 F.2d 844, 847 (11th Cir. 1985) (relying on state law). However, after *Boyle*, in a military case, the Eleventh Circuit noted that military interests are unique and particularly sensitive. See *Harduvel v. General Dynamics Corp.*, 878 F.2d 1311, 1317 (11th Cir. 1989) (finding military interests incompatible with state tort law). A lower court declined to extend the defense to service contracts. See *Amtreco, Inc. v. O.H. Materials, Inc.*, 802 F. Supp. 443, 445 (M.D. Ga. 1992). The United States District Court for the District of Columbia has extended the defense to nonmilitary contracts. See *Haltiwanger v. Unisys Corp.*, 949 F. Supp. 898, 906 (D.D.C. 1996); *Fagans v. Unisys Corp.*, 945 F. Supp. 3, 7 (D.D.C. 1996).

State courts are also divided. See, e.g., *Vermeulen v. Superior Court*, 251 Cal. Rptr. 805 (Cal. Ct. App. 1988) (applying government contractor defense to nonmilitary contracts); *Allison v. Merck & Co., Inc.*, 878 P.2d 948 (Nev. 1994) (implying in dicta that the defense does not apply to nonmilitary contracts); *Reynolds v. Penn Metal Fabricators, Inc.*, 550 N.Y.S.2d 811 (N.Y. Sup. Ct. 1990) (refusing to apply government contractor defense to nonmilitary contracts).

ness, tingling, or other arthritic conditions.¹³³ The facts recited below are taken from several of these multi-plaintiff cases.¹³⁴

In 1958, Burroughs Corporation received its first contract to construct ten prototype MPLSMs for the United States Postal Service.¹³⁵ In the early 1960s, Burroughs received a contract to manufacture twenty-six MPLSMs.¹³⁶ Postal employees oversaw production, reviewed and approved drawings, and ultimately approved the equipment.¹³⁷ By the 1970s, the contract called for two ten-key keyboards placed on two tiers of each console.¹³⁸ Exact specifications of the keyboard design were established in the contract. Moreover, the contract provided that "[a]ll special safety devices . . . for protection of operators . . . shall be provided as specified herein, or as shown on the drawings."¹³⁹ No alterations or warnings were allowed without government approval.¹⁴⁰ The machines were modified with government approval periodically until production stopped in 1986.¹⁴¹

The defects alleged were abundant and included both design and failure-to-warn deficiencies:

[Plaintiff's expert, Dr. Rani Leuder] first noted that most aspects of the operator console, such as the operator knee clearance and the keying and envelope slot height, were not adjustable, contrary to ergonomic principles. Furthermore, the keyboard failed to offer arm support. Dr. Leuder also found that the keyboard suffered from poor keyboard feedback, key vibration, inconsistent key force, and poor keyboard design. He also found that MPLSM operators underwent high rates of repetition and received no ergonomic training. Finally, he found that the "sweeping" task that operators performed during their breaks from keying, which consisted of removing mail from the MPLSM

¹³³ See, e.g., *Yeroshefsky*, 962 F. Supp. 710; *Houghtaling v. Unisys Corp.*, 955 F. Supp. 309 (D.N.J. 1996); *Haltiwanger*, 949 F. Supp. 898; *Fagans*, 945 F. Supp. 3; *Andrew*, 936 F. Supp. 821; *Russek v. Unisys Corp.*, 921 F. Supp. 1277 (D.N.J. 1996); *Wisner*, 917 F. Supp. 1501.

¹³⁴ See, e.g., *Haltiwanger*, 949 F. Supp. 898; *Andrew*, 936 F. Supp. 821; *Russek*, 921 F. Supp. 1277; *Schmid*, 1996 WL 421843.

¹³⁵ See *Russek*, 921 F. Supp. at 1283.

¹³⁶ See *id.*

¹³⁷ See *id.*

¹³⁸ Apparently, 12 consoles and operator chairs were on each MPLSM. See *Houghtaling*, 955 F. Supp. at 310. "The machine sends about 60 letters per minute past each station, where a worker reads ZIP codes and enters them on two ten-key, piano-style keyboards arranged in two tiers." *Id.*

¹³⁹ *Russek*, 921 F. Supp. at 1283 (citation omitted) (alterations in original).

¹⁴⁰ See *id.*; see also *Yeroshefsky v. Unisys Corp.*, 962 F. Supp. 710, 713-14 (D. Md. 1997).

¹⁴¹ See *Russek*, 921 F. Supp. at 1283.

sorting bins and further sorting it for ultimate distribution, presented an occupational risk because the height of the envelope bins was not adjustable. Dr. Leuder concluded that all these alleged design defects could contribute to causing [repetitive-stress injuries in] MPLSM operators.¹⁴²

At least by the late 1960s and early 1970s, both the Postal Service and Burroughs recognized certain risks associated with the keyboard and work-station design.¹⁴³ A congressional hearing in 1984 identified carpal tunnel syndrome and tendinitis as risks common to MPLSM operators.¹⁴⁴ In 1981, the report of a long-term study undertaken by the American Postal Workers Union and the National Institute of Occupational Safety and Health entitled "The Development of Chronic Trauma Disorders Among Letter Sorting Machine Operators" was released.¹⁴⁵ Although Burroughs suggested various alterations and changes, "[t]he Postal Service evaluated and ultimately rejected Burroughs' proposed modifications to the keyboard."¹⁴⁶ "Under the 1966 and 1974 contracts, Burroughs either suggested or investigated alterations to the keyboard and console The Postal Service evaluated and rejected all of these proposals."¹⁴⁷ In 1974, Burroughs specifically suggested manufacture of an "asynchronous keyboard" and a "heel of hand" rest, modifications that might have reduced repetitive-stress injuries.¹⁴⁸

As a result of the identified link between MPLSM and worker injuries, employees began filing complaints.¹⁴⁹ "In response [to worker complaints and congressional inquiry], the Postal Service, through its internal and contract research efforts, began to undertake modifications to the Postal Service workplace, including, simplification of the keying process, significant noise level reduction, and selection of an adjustable operator chair."¹⁵⁰

2. Application of *Boyle* to the MPLSM

There is no doubt, as the cases against Unisys so held, that the three-prong *Boyle* test was met. Unquestionably, the Postal Service

¹⁴² *Id.* at 1284.

¹⁴³ See *Schmid v. Unisys Corp.*, No. 4:95CV00864, 1996 WL 421843, at *10 (E.D. Mo. July 24, 1996).

¹⁴⁴ See *id.* at *11.

¹⁴⁵ See *id.*

¹⁴⁶ *Id.* at *12.

¹⁴⁷ *Andrew v. Unisys Corp.*, 936 F. Supp. 821, 828 (W.D. Okla. 1996).

¹⁴⁸ See *Russek v. Unisys Corp.*, 921 F. Supp. 1277, 1291 (D.N.J. 1996).

¹⁴⁹ See *Schmid*, 1996 WL 421843, at *11.

¹⁵⁰ *Id.* at *12; see also *Andrew*, 936 F. Supp. at 828.

exercised the requisite discretionary approval of reasonably precise specifications in the design of the MPLSM as required under *Boyle*.¹⁵¹ Moreover, the plaintiffs in these suits did not contend that Burroughs failed to comply with the contract specifications.¹⁵² Finally, evidence revealed that Burroughs informed the government of the risks and that the government was at least as informed as the manufacturer of the risks associated with the design of the machine.¹⁵³

Thus, the application of *Boyle* is quite straightforward. The difficult question is whether *Boyle* should apply in the first place to a letter-sorting machine manufactured for the United States Postal Service. Unlike the Ninth Circuit decisions, these courts fail to make a threshold *Boyle* inquiry as to whether important federal interests are in significant conflict with imposing state tort liability. Instead, these courts read *Boyle* as identifying both the parameters and scope of the defense as any instance where government discretion in the product design collides with state tort law. While government discretion was certainly used in formulating the contract specifications and economic consequences might have resulted by imposing tort liability upon Burroughs, asking the threshold question is most revealing: Are the federal interests to be protected as apparent in the procurement of a letter-sorting machine as they are in the purchase of a military fighter plane?¹⁵⁴

To answer that question, one must examine the consequence of the absence of a *Boyle* defense. The outcome under state law is admittedly variable. Assuming the product was defective, the manufacturer could have generally been held liable while the government employer would have been immune under federal worker compensation law.¹⁵⁵ However, the government would have paid for the atten-

¹⁵¹ See *Russek*, 921 F. Supp. at 1288 ("continuous back and forth review process" between the Postal Service and Burroughs in developing the design).

¹⁵² See *id.* at 1290.

¹⁵³ See *id.* at 1291.

¹⁵⁴ See *In re "Agent Orange" Prod. Liab. Litig.*, 534 F. Supp. 1046, 1054 n.1 (E.D.N.Y. 1982). As the *Agent Orange* court stated:

The purpose of the government contract[or] defense . . . is to permit the government to wage war in whatever manner the government deems advisable, and to do so with the support of suppliers of military weapons. Considerations of cost, time of production, risks to participants, risks to third parties, and any other factors that might weigh on the decisions of whether, when, and how to use a particular weapon, are uniquely questions for the military and should be exempt from review by civilian courts.

Id.

¹⁵⁵ See Federal Employees' Compensation Act, 5 U.S.C. §§ 8116(c), 8173 (1996)

dant tort risks of product use through product pricing. On the other hand, if a non-employee was injured, then the government would be immune as a result of the discretionary function and the manufacturer could be held liable. Again, the government would have paid for liability risks at the onset through product pricing. In addition, the manufacturer might have a defense in some states based either on sovereign immunity or agency under state law,¹⁵⁶ or upon a state-law specifications defense.¹⁵⁷

As courts surmise, without *Boyle* there would be times, in some states, where the government would be immune (under federal sovereign immunity principles or worker compensation laws) and the contractor could be sued. It is also true that the absence of the defense subjects the contractors to the laws, however disparate, of the fifty states. These arguments for the defense are not persuasive. National manufacturers routinely labor under nonuniform laws of the several states. Even the federal government abides by state tort law and accepts diverse outcomes.¹⁵⁸ Erroneously, some suggest *Boyle* reflects a need for uniform treatment of government contractors.¹⁵⁹ Consistency in law across the states, however, was never articulated as a goal in *Boyle*, although the Court did acknowledge that consistency sometimes justifies preemption.¹⁶⁰

(exclusive remedy).

¹⁵⁶ See *Nielsen v. George Diamond Vogel Paint Co.*, 892 F.2d 1450, 1456 (9th Cir. 1990); *Blizzard v. Motorola Inc.*, No. 94-0207, 1995 WL 216938, at *2-3 (E.D. Pa. Apr. 12, 1995).

¹⁵⁷ See *Nielsen*, 892 F.2d at 1455-56; LOUIS FRUMER & MELVIN FRIEDMAN, *PRODUCTS LIABILITY* § 2.02[2], at 2-78 (1994); 1 MARSHALL S. SHAPO, *THE LAW OF PRODUCTS LIABILITY* ¶ 12.10[2] (2d ed. 1990) (citing cases wherein courts refused to impose liability where products manufactured in accordance with plans and specifications, except where plans are patently defective).

¹⁵⁸ See 28 U.S.C. § 2674 (1994 & Supp. 1997) ("The United States shall be liable, respecting the provisions of this title relating to tort claims, in the same manner and to the same extent as a private individual under like circumstances"). See *generally* *Hatahley v. United States*, 351 U.S. 173 (1956) (choosing to be governed by law of state where tort occurs); *Faughnan v. Big Apple Car Serv.*, 828 F. Supp. 155 (E.D.N.Y. 1993) (same).

¹⁵⁹ See *Harduvel v. General Dynamics Corp.*, 878 F.2d 1311, 1317 (11th Cir. 1989) ("uniformity . . . is a key justification for application of federal common law").

¹⁶⁰ *Boyle* explained that sometimes preemption of state law is desirable because of a need for uniform treatment, but the Court did not bottom the government contractor defense on such a need for uniformity. "In some cases, for example where the federal interest requires a uniform rule, the entire body of state law applicable to the area conflicts and is replaced by federal laws." *Boyle v. United Techs. Corp.*, 487 U.S. 500, 508 (1988) (citing *Clearfield Trust Co. v. United States*, 318 U.S. 363, 366-67 (1943) (exploring rights and obligations of United States with regard to commercial paper)). Instead, the Court articulated a need to preempt state prod-

In the case of the MPLSM, at first blush *Boyle* appears to correct a fundamental unfairness to Burroughs. Without *Boyle*, Burroughs might be held liable in some jurisdictions for design flaws recognized and approved by the government, yet Burroughs would be unable to seek indemnification or contribution from the United States despite federal fault.¹⁶¹ In a nonmilitary context, does this outcome outweigh the state interest in allowing victims to recover against the manufacturer?¹⁶²

As discussed earlier, a manufacturer, doing business with the government and aware that the government will ultimately be immune from product-liability suits, can finance its own risk of liability by either (1) raising the product's price to insure against or otherwise fund the anticipated losses or, ideally, (2) expending extra money to manufacture a safer product.¹⁶³ This is the basic premise of strict liability. Although the second option was not available to Burroughs because the Postal Service refused to approve the suggested modifications offered by Burroughs, Burroughs was free to charge more for the MPLSM given its knowledge of potential injuries and liability exposure.¹⁶⁴ Burroughs could have given the government the

uct-liability law only in cases where state law conflicted with governmental discretion. State product-liability law still applies to federal procurement of "off-the-rack" purchases or where state law and federal specifications are compatible. "No one suggests that state law would generally be pre-empted in this context." *Boyle*, 487 U.S. at 509.

¹⁶¹ This is especially so in light of the Anti-Deficiency Act, 31 U.S.C. § 1341 (1993 & Supp. 1997), which precludes open-ended indemnification clauses. See *Hercules Inc. v. United States*, 116 S. Ct. 981, 987-88 (1996) (finding no express or implied-in-fact indemnity provisions permitted to cover manufacturer's liability to tort claimants).

¹⁶² Like Justice Brennan, some scholars question *Boyle's* correctness even in military procurement. See, e.g., Cass & Gillette, *supra* note 101, at 335 (concluding that *Boyle* does not achieve ideal outcome); Kellman, *supra* note 81, at 1648 (urging judicial deference to military—not judicial abdication). But cf. Davis, *supra* note 86, at 1100 (observing that *Boyle* should apply in limited military circumstances).

¹⁶³ See Calabresi, *supra* note 7, at 517; Rabin, *supra* note 7, at 213; Schwartz, *supra* note 7, at 436.

¹⁶⁴ In this case, Burroughs probably did pass on these risks because the defense was not well established until 1988. See generally *Hercules Inc. v. United States*, 116 S. Ct. 981 (1996) (tracing development of the government contractor defense).

Arguably, the marked-up price reflects the "true" cost of the product. See Wertheimer, *supra* note 101, at 195 n.25.

The policy of distributing the costs of product injuries by holding the manufacturer liable serves to compel the manufacturer to take into account the real costs of the product. When the manufacturer alters a product's price to cover the costs of the injuries caused by the product, the price then demonstrates the product's true cost to society. This result is desirable because it allows consumers to better appreciate the true costs of a particular product and consequently decide

option of either paying more for the machine or accepting the modifications. Had the government official confronted this choice, that official would have been better informed of the risks and benefits of the MPLSM as designed. Contrary to having a negative financial or discretionary impact, this scenario actually has a positive impact. The discretion of the government officer would actually have been enhanced (rather than undermined) if Burroughs revealed the cost of managing the risk of harm associated with the manufacture of the MPLSM as designed.¹⁶⁵ The government pays an artificially deflated cost when injury is not accounted for in the price of the article.

Finally, there is an inescapable moral component to risk allocation. If, as alleged in the case of the MPLSMs, Burroughs suspected as early as 1966¹⁶⁶ that a better design could minimize injuries, it had thirty years and approximately nine-hundred MPLSMs over which to spread the risk of the injuries it could foresee. Postal Service employees had no such time or ability to plan for their eventual diseases and injuries.¹⁶⁷

The story of the MPLSM justifies requiring the cost of injury to be borne by the manufacturer at the end-stage through lawsuits. It also justifies permitting and encouraging the manufacturer to pass those costs on to the United States at the beginning of the transaction through increased contract prices for the manufacture of hundreds of machines.¹⁶⁸ In short, without factoring in external costs, *Boyle* dissuades federal officers from exercising reasonable discretion and instead encourages the decision to purchase products at the cheapest price without regard to personal injury.

The United States refused to permit modifications and Burroughs continued to manufacture the machines despite their collective knowledge that the machines, as designed, caused physical injury to nonmilitary federal workers engaged in the blue-collar enterprise of sorting the United States mail. Only when employees filed complaints and Congress investigated their claims did the United States

whether or not to purchase it.

Id.

¹⁶⁵ Because these were federal employees, the United States actually suffered a loss in the form of worker compensation payments that is not recoverable. The federal official should have considered the cost of those claims in rejecting product improvements.

¹⁶⁶ See *Andrew v. Unisys Corp.*, 936 F. Supp. 821, 828 (W.D. Okla. 1996).

¹⁶⁷ See Calabresi, *supra* note 7, at 517 (noting that it is preferable to charge all consumers at the outset than to let all risk fall on the injured consumer).

¹⁶⁸ See *Schmid v. Unisys Corp.*, No. 4:95CV00864, 1996 WL 421843, at *5 (E.D. Mo. 1996).

consent to modifications. From these events, one can conclude that external pressure played a significant role in the eventual modifications of the machine. Allowing tort liability to serve as that external force in improving product safety or deterring irresponsible design decisions is exactly what both the government and the manufacturer needed in order to exercise reasonable, responsible discretion in the design of the MPLSM.¹⁶⁹ Allowing government officials to assume that injury to civilians is "costless" proved a grave error in this case.

IV. APPLICABILITY OF *BOYLE* TO FAILURE-TO-WARN CASES

Burroughs' and the government's failure to warn MPLSM users about the potential for crippling injuries is even more difficult to justify than the government's refusal to permit design modifications. The following sections review the application of *Boyle* in the context of failure-to-warn claims.

At common law, a product manufacturer has a duty in negligence to warn users of potential dangers associated with the intended or foreseeable uses of its products if the manufacturer knows or should know the dangers. While there is little distinction in a failure-to-warn claim based upon strict liability as opposed to negligence, the appropriate inquiry in strict liability is "whether the product was defective in light of the warnings that accompanied it."¹⁷⁰

When looking at government contracts and state tort law liability for failure to warn users of dangerous products, the issue is whether *Boyle* applies at all—and if so, how. Should the common-law duty to warn of dangers associated with a product be excused in light of the contractual specifications for the product approved by the government? How to apply *Boyle* to failure-to-warn claims has been the source of considerable controversy among the circuits. Three standards have emerged.

A. *Duty to Warn Unless Prohibited by the Discretionary Act of a Government Official*

Several circuits, including the Ninth Circuit, have been circumspect when determining whether the state-law duty to warn is preempted by application of the defense.¹⁷¹ An example of a narrow ap-

¹⁶⁹ See Schwartz, *supra* note 7, at 422-30.

¹⁷⁰ Frederick C. Schafrick, *Product Liability Suits for Failure to Warn of the Hazards of Regulated Products*, 32 TORT & INS. L.J. 833, 838 (1997); see also JOHN L. DIAMOND ET AL., UNDERSTANDING TORTS 345-46 (1996).

¹⁷¹ In this regard, the Second and Eleventh Circuits appear in accord with the Ninth Circuit. In *Dorse v. Eagle-Picher Industries, Inc.*, 898 F.2d 1487, 1489 (11th Cir.

plication of *Boyle* in the failure-to-warn context is *Snell v. Bell Helicopter Textron, Inc.*,¹⁷² where families of three individuals who died in a Marine Corps UH-1N helicopter crash filed suit against the manufacturer of the helicopter and component-parts manufacturers.¹⁷³ Bell asserted the "military contractor defense" and sought summary judgment.¹⁷⁴ As to when *Boyle* will apply to preempt common law failure-to-warn claims, the court explained:

[A]s for the application of the military contractor defense against it, Bell would have to show that "in making its decision whether to provide a warning . . . [it] was acting in compliance with reasonably precise specifications imposed on it by the United States."

. . . .

Bell has shown neither that "the government considered the appropriate warnings, if any, that should accompany the product," nor that it "approved reasonably precise specifications" constraining Bell's ability to comply with whatever duty to warn it may have had.¹⁷⁵

1990) (per curiam), for example, the Eleventh Circuit held that while *Boyle* applies to failure-to-warn claims, the defendant must show that the contractor could not comply with the specifications of the contract and its state-law duty to warn. The contractor in *Dorse* was not precluded by government specifications from attaching warning labels to its asbestos insulation and therefore could not claim the benefit of the defense. *See id.* at 1490.

Similarly, in *In re Joint Eastern & Southern District New York Asbestos Litigation*, 897 F.2d 626 (2d Cir. 1990), the Second Circuit stated:

[The defendant] must show that the applicable federal contract includes warning requirements that significantly conflict with those that might be imposed by state law. . . . The contractor must show that whatever warnings accompanied a product resulted from a determination of a government official . . . and thus that the Government itself "dictated" the content of the warnings meant to accompany the product.

Id. at 630.

¹⁷² 107 F.3d 744 (9th Cir. 1997).

¹⁷³ *See id.* at 745.

¹⁷⁴ First, the court denied summary judgment as to the design defect. *See id.* at 748-49. The court explained that, while the helicopter was indisputably military equipment, the government left the placement and design of the allegedly defective drive shaft to Bell. *See id.* at 748. The court held that the government had not "approved reasonably precise specifications" of the drive shaft, and thus issues of fact remained on the application of the first prong of *Boyle*. *See id.* The court next ruled that, while *Boyle* may apply to manufacturing defects as well as design defects, the lack of reasonably precise specifications precluded application of the defense in this instance. *See id.* at 749.

¹⁷⁵ *Id.* at 749 (citations omitted); *see also* *Butler v. Ingalls Shipbuilding, Inc.*, 89 F.3d 582, 586 (9th Cir. 1996) (remanding for determination of whether Navy contract conflicted with contractor's duty to warn under state law).

In the Ninth Circuit, *Boyle* will only prevent liability of a contractor for failure to warn when the government contract specifications place the contractor's performance of the contract in conflict with the common-law duty to warn product users.¹⁷⁶ This rule is consistent with *Boyle's* demand that the defense apply only with respect to products made from precise specifications. As *Boyle* noted, without the precise-specification requirement, "[t]he contractor could comply with both its contractual obligations and the state-prescribed duty of care. No one suggests that state law would generally be preempted in this context."¹⁷⁷

Importantly, the Ninth Circuit has recognized that there is no sound justification for disallowing federal workers exposed to dangerous products from making an informed choice to protect themselves or even leave their jobs. In holding the government contractor defense inapplicable to a failure-to-warn claim absent a showing of conflict between the specifications and the state-law duty to warn, the Ninth Circuit suggested the arrogance of keeping government workers ignorant of product dangers:

That the inadequacy of the defendants' warnings was a legal cause of the plaintiffs' injuries cannot be denied. The plaintiffs could have taken precautionary measures or left their jobs had they been warned of the dangers. . . . Thus, even were asbestos insulation "military equipment," we would affirm the district court's decision to preclude the military contractor defense.¹⁷⁸

The Ninth Circuit takes seriously *Boyle's* edict to search first for a "federal policy or interest" in "significant conflict" with the operation of state law¹⁷⁹ before allowing the government contractor defense, even in the context of military equipment. *Boyle* should not indulge the immoral fear that informed workers will make informed choices to protect themselves from injury.

¹⁷⁶ See *Butler*, 89 F.3d at 586. The *Butler* court stated:

Whereas the government contractor's defense may be used to trump a design defect claim by proving that the government, not the contractor, is responsible for the defective design, that defense is inapplicable to a failure to warn claim in the absence of evidence that in making its decision whether to provide a warning against use of the padeye to lift the platform, or some other suitable warning, Ingalls was "acting in compliance with 'reasonably precise specifications' imposed on [it] by the United States."

Id. (alteration in original) (citations omitted).

¹⁷⁷ *Boyle v. United Techs. Corp.*, 487 U.S. 500, 509 (1988).

¹⁷⁸ *In re Hawaii Fed. Asbestos Cases*, 960 F.2d 806, 814 (9th Cir. 1992).

¹⁷⁹ See *Boyle*, 487 U.S. at 507.

B. The Government Promulgates or Approves Reasonably Precise Specifications as to the Design Itself

At the other end of the spectrum, some courts have held that where the government contractor defense has been successfully invoked as to a design defect, the failure-to-warn claim as to that defect is also barred:¹⁸⁰ "[W]here the manufacturer has established a *Boyle* defense as to the design defect, and the relevant specifications are silent as to warnings, *Boyle* bars the failure to warn claim as well."¹⁸¹ These courts reason that the "'continuous back and forth' as to the product feature containing the alleged design defect . . . resulted in a government-approved specification that did not include warnings."¹⁸² The Fifth Circuit has correctly clarified, however, that if the failure to warn is a wholly separate defect claim, then *Boyle* requires the defendant to establish "an identifiable federal interest or policy in the existence or methods of warning and a significant conflict between the federal interest or policy and the operation of state law."¹⁸³

Under this reasoning, when the design defect is protected under *Boyle*, courts do not require evidence that the manufacturer suggested warnings and was rebuffed or that warnings were specifically considered during the approval process and mutually discarded.¹⁸⁴ Instead, these courts are satisfied that an approval of the product as designed necessarily approved the product as designed with the warnings included or omitted.

¹⁸⁰ See, e.g., *In re Air Disaster at Ramstein Air Base, Germany*, 81 F.3d 570 (5th Cir. 1996), modified on denial of reh'g, *Perez v. Lockheed Corp.*, 88 F.3d 340 (5th Cir. 1996), cert. denied sub. nom. *Chase v. Lockheed Corp.*, 117 S. Ct. 583 (1996); *Bailey v. McDonnell Douglas Corp.*, 989 F.2d 794 (5th Cir. 1993); *Stout v. Borg-Warner Corp.*, 933 F.2d 331 (5th Cir. 1991); *Smith v. Xerox Corp.*, 866 F.2d 135 (5th Cir. 1989); *Russek v. Unisys Corp.*, 921 F. Supp. 1277 (D.N.J. 1996); *Koutsoubos v. Boeing Vertol*, 553 F. Supp. 340 (E.D. Pa. 1982).

¹⁸¹ *Russek*, 921 F. Supp. at 1293 ("The Court believes that this approach is most consonant with *Carley v. Wheeled Coach*, 991 F.2d 1117 (3d Cir. 1993)"); see also *In re Air Disaster at Ramstein Air Base*, 81 F.3d at 576 ("[I]f the failure to warn claim is part of the design defect or unreasonably dangerous product theory of liability, then government contractor immunity applies").

¹⁸² *Russek*, 921 F. Supp. at 1294.

¹⁸³ *In re Air Disaster at Ramstein Air Base*, 81 F.3d at 576 (quoting *Garner v. Santoro*, 865 F.2d 629, 635-36 (5th Cir. 1989)).

¹⁸⁴ See *Slawotsky*, *supra* note 79, at 945 ("[A] specification that does not reference a warning should be considered tantamount to a specification that prohibits them To hold otherwise would render the contractor defense illusory").

C. *A Middle Ground: The Government Approved the Warnings*

Between these two poles, some judicial decisions have migrated toward the middle ground articulated in *Tate v. Boeing Helicopters*.¹⁸⁵ These courts require that—just as with the design itself—in order to invoke the defense, the warnings or lack of warnings be considered in a “continuous back and forth” process between the government and the contractor.¹⁸⁶

In *Tate*, one crash survivor and several family members of two deceased soldiers filed suit against the manufacturer of an army helicopter alleging that design defects and the manufacturer’s failure to warn caused the crash of an aircraft. Five army soldiers suffered injury or death as a result of a training mission aboard a Chinook helicopter.¹⁸⁷ The soldiers were training to attach heavy equipment to the helicopter using a three-hook system mounted to the underside of the craft.¹⁸⁸ During the nighttime mission, the crew attached a 15,760 pound block of concrete to the craft using night-vision goggles.¹⁸⁹ Unfortunately, the block of concrete caught on a hill as it was lifted and worked as an anchor when the pilot attempted to level the aircraft. The helicopter pitched forward and crashed. Three soldiers died and two suffered injuries in the crash.¹⁹⁰

¹⁸⁵ 55 F.3d 1150 (6th Cir. 1995); *see also* Wagner, *supra* note 67, at 389 (arguing that government contractors should not bear the cost of government decisions and need more protection from suits).

Two recent decisions suggest that both the Fifth and the Ninth Circuits are actually migrating toward a *Tate* standard. *See In re Air Disaster at Ramstein Air Base*, 81 F.3d at 576 (refining an earlier Fifth Circuit rule to require a “significant conflict” between state law and government specifications when the warning claim is separate from the design-defect claim). *See generally* Butler v. Ingalls Shipbuilding, Inc., 89 F.3d 582 (9th Cir. 1996) (finding no requirement that government must actually prohibit warnings).

¹⁸⁶ *See* Oliver v. Oshkosh Truck Corp., 96 F.3d 992, 1003-04 (7th Cir. 1996) (applying *Tate*), *cert. denied*, 117 S. Ct. 1246 (1997); Yeroshefsky v. Unisys Corp., 962 F. Supp. 710, 718 (D. Md. 1997) (adopting *Tate*); Houghtaling v. Unisys Corp., 955 F. Supp. 309, 314 (D.N.J. 1996) (determining that under either the Fifth or Sixth Circuit approach, the defense is applicable where the postal service required all safety devices be approved and where “Unisys could not add warnings, markings, or labels to the MPLSM” without approval); Fagans v. Unisys Corp., 945 F. Supp. 3, 6-7 (D.D.C. 1996) (finding that the government contractor defense is applicable to a failure-to-warn claim, where the postal service provided specifications for all safety devices and required that they be followed—thus applying *Tate*); Wisner v. Unisys Corp., 917 F. Supp. 1501, 1512 (D. Kan. 1996) (adopting *Tate*).

¹⁸⁷ *See Tate*, 55 F.3d at 1152.

¹⁸⁸ *See id.*

¹⁸⁹ *See id.*

¹⁹⁰ *See id.* at 1151.

In addition to claiming that the design of the hook system was faulty,¹⁹¹ plaintiffs also alleged that the manufacturer "failed to adequately warn the crew members of the dangers associated with use of the tandem hook system."¹⁹² The Sixth Circuit remanded the case on the failure-to-warn claim, ruling that "the government contractor defense is not necessarily established merely by satisfying the government contractor defense conditions as to the design defect claims."¹⁹³

The court concluded that, separate and apart from applying the defense to a defective design claim, a failure-to-warn claim requires a distinct showing that (1) a government official exercised discretion in approving warnings intended for users, if any, (2) the contractor provided warnings conforming to the approved warnings, and (3) the contractor warned the government of the dangers concerning the use of its product of which it knew and the government did not.¹⁹⁴ In order to apply the defense, the court specifically required that approval of the warnings or the decision not to warn undergo the same back and forth approval process required by design defect claims.¹⁹⁵

By requiring a *Boyle* analysis of the separate state-law failure-to-warn claim, the *Tate* rule recognizes that *Boyle* requires the exercise of government discretion in the context of the alleged defect, and the claimed defect in these cases is the deficiency of warnings—not the design itself.¹⁹⁶ It also recognizes that the defect of inadequate warning is a separate and distinct claim from a design-defect claim even as to the same component part under state law.

Unlike the Fifth Circuit approach, *Tate* ensures that contractors will raise the issue of warnings to the government when designing a product, thus serving *Boyle*'s goal of ensuring that the government is

¹⁹¹ Applying *Boyle* to the design-defect claim, the court concluded that the Army had engaged in "back and forth" collaboration in the development of the hook system, that the system conformed to the specifications, and that "the Army was aware of all the dangers of which the contractors were aware." *Id.* at 1156.

¹⁹² *Id.*

¹⁹³ *Tate*, 55 F.3d at 1157.

¹⁹⁴ *See id.*

¹⁹⁵ *See id.* On remand, the lower court held that the contractor was entitled to the defense on the failure-to-warn claim. The contractor showed that the helicopter's training manual was created over a one-and-a-half year period with continuous discussions, review, updating, and revision by the army and the manufacturer. *See Tate v. Boeing Helicopters*, 921 F. Supp. 1562, 1567 (W.D. Ky. 1996).

¹⁹⁶ *See Oliver v. Oshkosh Truck Corp.*, 96 F.3d 992, 1003 (7th Cir. 1996) (expressly adopting *Tate* and finding that the "touchstone" in failure-to-warn claims is whether the discretionary function of the government is implicated by the warning decisions), *cert. denied*, 117 S. Ct. 1246 (1997).

well-informed in exercising its discretion. However, the more narrow rule of the Second, Ninth, and Eleventh Circuits is superior. By requiring a conflict between the specifications and state tort law duties to warn, the rule not only ensures that contractors will raise the issue of warnings to government officers, but also that contractors will comply with state law to the extent possible without violating the terms of the contract.

D. The Failure To Warn Has No Justification Outside the Military Arena

Outside the military context, there is little social utility in failing to warn consumers of dangers associated with the use of products. In fact, the immorality of *Boyle's* application in the warning context underscores the general irresponsibility *Boyle* engenders outside the military context where there is no "greater good" justification. Products not purchased to defend the nation from enemy forces need not be cloaked in *Boyle's* defenses.

Boyle can be justified within the military, even in the warning context, because typically soldiers must perform regardless of the danger or their knowledge of the danger.¹⁹⁷ Arguably, there may be legitimate reasons not to warn soldiers of dangers associated with the activity or product use.¹⁹⁸ As the Ninth Circuit explained, "a warning

¹⁹⁷ Soldiers are not free to refuse a lawful order out of personal fear of the consequences. See, for example, *United States v. Talty*, 17 M.J. 1127, 1129 (N.M.C.M.R. 1984):

Appellant urges that the duress resulted from his genuine apprehension that entry into the reactor compartment would expose him to hazardous levels of radiation and thereby cause irreparable genetic damage. . . . Appellant's contention that duress, amounting to a legal defense, can inhere in a lawful order requiring performance of military duty "in harm's way" simply strains credulity. Regardless of the sincerity of his beliefs, the premise upon which he rests this defense has no basis in military law.

Id.

¹⁹⁸ There may be a military purpose in not warning soldiers of dangerous products because knowledge of the danger does not excuse its ordered use, if that order is lawful. For example, in *Doe v. Sullivan*, 938 F.2d 1370 (D.C. Cir. 1991), a soldier challenged the Department of Defense's (DOD) authority prior to Gulf War deployment to order ingestion of experimental drugs designed to combat potential chemical warfare exposure. See *id.* at 1371-73. The drugs pyridostigmine and botulinum toxoid were classified as "investigational" by the Food and Drug Administration (FDA). See *id.* at 1372 & n.1. The DOD sought and obtained an FDA waiver of the military's informed consent obligations. See *id.* at 1374. The appellate court held that (1) the informed-consent requirements were not feasible in light of the war and (2) the FDA's waiver of the informed-consent requirement was lawful. See *id.* at 1382. The court expressed extreme deference to military decisions. See *id.* at

directly to crews of the . . . [defectively designed] aircraft . . . would not have prevented the accidents here, since the crews had no choice but to fly[.]”¹⁹⁹

On the other hand, civilian workers and civilians generally should be free to protect themselves from injury or to avoid exposure to danger. To the extent warnings serve that purpose, there is no rational contrary government purpose to protect.²⁰⁰ Civilian postal workers sorting mail for the United States were entitled to be warned that the machines at which they labored posed a serious health risk to their hands and arms that one day might jeopardize their ability to enjoy activities and pursuits within their private lives. These workers might have, on personal balance, left their jobs or otherwise protected themselves from the exposure to repetitive-stress injuries. Furthermore, they might have demanded changes to the machines, taken more frequent breaks, varied their position at the work station, or worn wrist guards and splints. They were afforded no such opportunities despite state products liability laws that required the manufacturer to place warnings on these machines or bear the liability consequences. As a result of *Boyle*, no one is held accountable for the losses suffered as a result of this failure to provide warnings.

V. CONCLUSION

When the government contractor defense is applied to the procurement of military equipment in contracts of import to national security and defense, it serves important government interests. It accommodates the military's organizational structure that necessarily requires government officers to weigh profound risks of personal injury against matters of national security and defense.

Such important federal interests are not at stake in other types of federal procurement. The defense should not extend to other government contractors because its application discourages accurate pricing of manufactured goods, including the cost of injury and harm to the public. The defense promotes a less-informed exercise

1380. While acknowledging that medical treatment is an important individual liberty, the court nevertheless agreed with the DOD's position that use of the drugs without informed consent was justified because "administering the drugs uniformly prevents unnecessary danger to troops and medical personnel from injury to, or the death of, fellow military personnel in battle." *Id.* at 1383.

¹⁹⁹ *McKay v. Rockwell Int'l Corp.*, 704 F.2d 444, 455 (9th Cir. 1983).

²⁰⁰ See *In re Hawaii Fed. Asbestos Cases*, 960 F.2d 806, 814 (9th Cir. 1992) (finding that had the shipyard workers been warned of the deadly effects of asbestos exposure they "could have taken precautionary measures or left their jobs").

of discretion by government officers who need not consider the cost of injury when deciding whether a product, as designed, is worth its cost. It engages the fiction that every government contract with reasonably precise specifications represents the discretionary act of a government official who has weighed the risks and benefits of a product design. Yet it provides no incentive for that official to consider the risk and cost of personal injury.

As to its application to failure-to-warn claims, the public good from warnings far outweighs the risk that the government might have had a reason for precluding the manufacturer from placing warnings on its products, especially outside of the military context. Thus, a narrow test requiring manufacturers to abide by state tort law unless precluded by a demonstrated conflict with government specifications balances the public good by requiring that any contractor who seeks to shield itself behind the federal government must have suggested that the government place warnings on products in compliance with state law.

The government contractor defense forgives manufacturers for product defects causing personal injury that would otherwise be compensable under state law. Because the defense so fundamentally changes the principles of accountability, deterrence, and compensation rooted in state tort law, in each instance the Ninth Circuit correctly examines the federal interest at stake. The defense should be limited to those cases where the most important federal interests collide with state tort law interests. Courts giving broad application of the defense fail to appreciate the important public-safety interests served by tort liability.